

# MINING ENGINEERING INDEX TO VOLUME 52

January-December 2000

## PART 1

Feature Articles, Technical Papers, Industry Newswatch, News Briefs, Technology News, Washington Survey and The Drift of Things

\* Denotes feature article or technical paper

### A

#### Accidents

- design flaws contribute to tailings dam failure. Jun 12
- spill injures eight at Yanacocha. Jul 19
- tailings and mine waste.\* Jun 97
- workers missing after tailings overflow. Jun 12
- Achanti, V.B., *Bit geometry effects on failure characteristics of rock*. \* Jun 101
- ARD mitigation at Mt. Whaleback.\* Feb 51

#### Acquisitions

- acquisitions increase AngloGold's output. May 14
- aggregates consolidation to continue. May 13
- Alcan launches takeover of Alusuisse. Oct 19
- Alcan, Algroup closer to merger. Jul 14
- aluminum merger completed. Jun 11
- aluminum merger fails. May 15
- aluminum merger proposed. Apr 10
- American Limestone sold. Jul 29
- Anglo American buys Shell Coal. Jul 12
- AngloGold buys interest in Mali mine. Aug 14
- Aur gets financing for Quebrada Blanca. Aug 9
- Billiton leads in contest for Rio Algom. Oct 15
- Billiton wins Rio Algom. Nov 15
- Cominco negotiates for Iranian zinc deposit. Jul 29
- Cominco's board rejects Teck's offer. Sep 42
- CSR America buys aggregates business. Aug 13
- CSR America buys another aggregates company. Sep 28
- CVRD acquires stake in iron ore company. Jul 15
- Dayton Mining moves into Nevada. Jul 18
- Gold Fields, Franco-Nevada agree to merger. Jul 25
- Gold Fields, Franco-Nevada merger blocked. Nov 15
- Hanson bids for aggregates company. Jan 14
- Inco acquires more of Voisey's Bay. Oct 16
- LaFarge buys stone quarry. Sep 35
- Laotian copper-gold project sold. Feb 13
- merger activity tops \$17 billion. Sep 25
- merger activity tops \$20 billion. Oct 13
- Noranda acquires 6% of Rio Algom. Jun 17
- Noranda gains control of Falconbridge. Sep 28
- North rejects Rio Tinto's takeover bid. Aug 7
- Pangea agrees to Barrick's takeover bid. Aug 9
- Pasminco buys into Peruvian zinc project. Sep 23

- Pinnacle acquires vanadium leases. Jul 17
- Quebrada Blanca deal his roadblock. Apr 11
- research firms to merge. Mar 14
- Rio Tinto wins bidding war for North. Sep 16
- study reassesses exploration vs. acquisition. Nov 16
- Sumitomo increases stake in nickel and copper. May 24
- Teck to increase interest in Cominco. Aug 14
- Vulcan acquires aggregates facilities. Oct 15
- Winspear agrees to De Beers takeover. Oct 15
- Winspear rejects De Beers' takeover bid. Aug 12
- Africa, zinc project taking shape. Jan 11
- Agapito, J.F.T., *Two-seam mining stability at OCI's Big Island trona mine*. \* Apr 27

#### Aggregates

- aggregates consolidation to continue. May 13
- aggregates production will level off. Sep 34
- CSR America buys aggregates business. Aug 13
- CSR America buys another aggregates company. Sep 28
- Hanson bids for aggregates company. Jan 14
- industrial minerals review.\* Jun 36
- NSA, NAA merge. Sep 35
- telescoping conveyor available for aggregates industry. Nov 23
- US construction expected to decline. Feb 11
- Vulcan acquires aggregates facilities. Oct 15

#### Alabama

- annual review.\* May 53
- Phillips increases coalbed methane reserves. Nov 21

#### Alaska

- annual review.\* May 54
- claim staking improved in Alaska. Jul 26
- court revokes Redfern's mine permit. Aug 13
- drilling at Pogo deposit. Sep 42
- native corporation operates calcium carbonate mine. Jun 14
- online presentation aids teaching.\* Nov 42
- Red Dog to increase production. Mar 14
- sustainable development at Red Dog.\* Nov 25

#### Alberta, oil sands project planned. Apr 14

#### Alcan Aluminium

- Alcan, Algroup closer to merger. Jul 14
- Alcan launches takeover of Alusuisse. Oct 19
- aluminum merger proposed. Apr 10

- aluminum merger fails. May 15
- Aloca, aluminum merger completed. Jun 11

#### Aluminum

- Alcan, Algroup closer to merger. Jul 14
- Alcan launches takeover of Alusuisse. Oct 19
- Aloca, aluminum merger completed. Jun 11
- aluminum dome stores limestone. Jan 32
- aluminum merger proposed. Apr 10
- aluminum merger fails. May 15
- aluminum merger completed. Jun 11
- CVRD gets financing to expand aluminum plant. Jul 28
- India increases zinc, aluminum production. Jul 16
- Indian aluminum project privatized. Sep 44
- Pechiney to expand Venezuelan bauxite facility. Sep 16

#### Alusuisse

- Alcan, Algroup closer to merger. Jul 14
- Alcan launches takeover of Alusuisse. Oct 19
- aluminum merger proposed. Apr 10
- aluminum merger fails. May 15

#### AMD

- improvements in AMD technology.\* Sep 67
- treatment technology introduced. Sep 19

#### AME Mineral Economics

- American Coal, coal production records set. Jul 28
- Americans for Balanced Energy, group promotes increased coal use. Oct 6
- China major coal player. Apr 8
- Iron ore production expected to grow. Aug 7
- mine production increases. Mar 10
- production cuts helps nickel price. Feb 7

#### Anaconda Nickel

- Anaconda, Gold Fields form exploration alliance Oct 19
- Murrin Murrin to expand. Jul 27
- Murrin Murrin increases production. Dec 14
- retribution sought from Fluor Daniel. Sep 44
- Anand, R., *Eskay Creek Mine and Mill — a continuing success*. \* Jan 19
- Andrews, M.L., *Two-seam mining stability at OCI's Big Island trona mine*. \* Apr 27

#### Anglo American

- zinc project taking shape. Jan 11
- Anglo American buys Shell Coal. Jul 12

#### Anglo American

- develops zinc mine. Oct 16
- sells platinum interest. Nov 21
- Anglo American Platinum, mine announced. Mar 14

## AngloGold

acquisitions increase output. May 14  
buys interest in Mali mine. Aug 14  
Cresson reserves increase. May 19  
Geita gold mine begins production.  
Sep 16

Mali gold mine to be developed. Apr 7  
production improves. Sep 31

## Antofagasta Minerals

copper project to be built. Jan 7  
Los Pelambres increases output.  
Oct 14

Apex Silver, moves ahead with San  
Cristobal. Oct 14

## Arch Coal

ventilation plan approved for West Elk  
Mine. Jul 27  
West Elk Mine returns to production.  
Sep 40

## Argentina

Alumbrera Mine cuts costs. Mar 11  
gold reserves increase at Argentina  
deposit. Jun 13

Veladero reserves increase. May 19  
Aribiter, N., *Development and scale-up of  
large flotation cells.* Mar 28

## Arizona

annual review.\* May 58  
Arizona copper mine to be built. Jan 13  
copper adds to Arizona's economy.  
Jul 20  
mica project to be developed. Jan 14  
mica mine completes first year. Mar 14  
Morenci converts copper production to  
leaching. Jan 36  
mining foundation honors inductees.\*  
Nov 38

Arthur, B., *Using diagnostic process analy-  
sis to improve cash flow at  
Newmont's Carling Mill No. 4.*\*  
Jan 37

## Ashanti Goldfields

Ashanti pours gold at Geita. Jul 25  
Geita gold mine begins production.  
Sep 16

Ashton Mining, acquired by Rio Tinto.  
Dec 14

Atacama Minerals, iodine property devel-  
oped. Nov 15

Atlas Consolidated Mining and Develop-  
ment, China copper mine to reopen.  
Jul 29

## Atlas Copco

drilling, grouting for TBMs. Apr 39  
introduces exploration drilling rig. Sep  
64  
new LHD available. Oct 38

## Aur Resources

gets financing for Quebrada Blanca.  
Aug 9  
Quebrada Blanca deal his roadblock.  
Apr 11

Australasian Gold Mines, tantalum project  
to be developed. Oct 19

## Australia

Anaconda, Gold Fields form exploration  
alliance. Oct 19  
ARD mitigation at Mt. Whaleback.\*  
Feb 51  
Australian gold mine reopens. Jan 10  
Australians add local color to medals.  
Oct 4  
automated loading system tested. Sep 4  
Cannington could be largest silver  
mine. Jan 4  
lateritic nickel deposit to be developed.  
Sep 40  
mining leases granted. Apr 16  
Murrin Murrin increases nickel produc-

tion. Dec 15

Murrin Murrin to expand. Jul 27  
new company to be formed. Jan 4  
Peabody seeks to maximize value of  
Australian assets. Sep 26  
retribution sought from Fluor Daniel.  
Sep 44

Rio Tinto wins Ashton Mining. Dec 14  
tantalum project to be developed. Oct  
19

vanadium mine opens. Jun 17  
Wallaby gold mine to be developed.  
Dec 12

Australian Premium Resources, new com-  
pany to be formed. Jan 4

*Automated guidance systems for under-  
ground machines: Can they benefit  
my future project?*\* W.L.  
Hollinshead. Dec 68

## Awards

eight inducted into hall of fame.\*  
Aug 43  
how orebodies are found.\* Jul 31  
microbiology in metallurgical pro-  
cesses.\* Nov 49  
minerals resource development.\* Jul 37  
mining foundation honors inductees.\*  
Nov 38  
NMA, MSHA safety awards announced.  
Oct 16  
Northshore wins safety award. Jun 15  
Peabody wins reclamation, safety  
awards. May 22  
Sentinels of Safety awards announced.  
Jan 12  
surface mine reclamation awards.  
Jan 12

## Azco Mining

mica project to be developed. Jan 14  
mica mine completes first year. Mar 14

## B

Ball clay, industrial minerals review.\*  
Jun 28

Bank of England, sells 25 t of gold. Dec 16  
Banff Resources, cobalt, copper mine  
planned for Uganda. Nov 22

*Banning cyanide use at McDonald — an  
attack on open-pit mining.*\* R.D. De  
Voto, T. P. McNulty. Dec 19

Barite, oil drilling drives barite demand.  
Mar 12

## Barrick Gold

earnings increase. Mar 8  
gold, diamond plants to be modernized.  
May 20  
gold program pays off for Barrick.  
Sep 31  
gold reserves increased at Tanzanian  
project. Nov 13  
Pangea agrees to Barrick's takeover  
bid. Aug 9  
Bateman, plough feeder reclaims bulk  
material. Oct 39

## Battle Mountain Gold

Crown Jewel receives unfavorable  
ruling. Mar 14  
water pollution case settled. Jun 17  
Baur, E.R., *Deep cut: ground control and  
worker safety in coal mines.*\* Jun  
110

## Bauxite

industrial minerals review.\* Jun 28  
Pechiney to expand Venezuelan baux-  
ite facility. Sep 16  
Beckman, S., *Integrated bioreactor system  
for the treatment of cyanide, metals  
and nitrates in mine process water.*\*  
Sep 84

Beus, M.J., *Mine-shaft conveyance moni-  
toring.*\* Oct 55

## BHP

affirms its minerals commitment. Aug 4  
ARD mitigation at Mt. Whaleback.\*  
Feb 51

BHP, Falconbridge in nickel joint ven-  
ture. Aug 14  
Cannington could be largest silver  
mine. Jan 4

Kvaerner to build BHP's copper project.  
Aug 14

Ok Tedi Mine should close. Apr 10

Ok Tedi may remain open. May 20

records record profits. Sep 25

Biles, G., *Eskay Creek Mine and Mill — a  
continuing success.*\* Jan 19

## Billiton

Chinese lead-zinc joint venture formed.  
Jul 23

lateritic nickel deposit to be developed.  
Sep 40

leads in contest for Rio Algom. Oct 15  
wins Rio Algom. Nov 15

Bise, C.J., *Deep cut: ground control and  
worker safety in coal mines.*\* Jun  
110

*Bit geometry effects on failure characteris-  
tics of rock.*\* Achanti, V.B., Khair,  
A.W. Jun 101

## Black Beauty Coal

Black Beauty builds Illinois coal mine.  
Oct 13

diamond exploration proceeds. Feb 7  
Blasting, mining still largest explosives  
market., O'Neil, T.; Nov 4

## BLM

bill limits Interior's changes to mining  
law. Sep 8  
BLM auctions underground coal leases.  
Jul 28  
issues commodity pricing policy. Aug 4  
Leshy deals mining another setback.  
Mar 6

limited on rulemaking for public lands.  
Nov 6

Boliden, develops Swedish copper-zinc  
mine. Dec 13

Bolivia, Apex moves ahead with San  
Cristobal. Oct 14

Boman, P., *Acceleration and GPS data  
monitor truck-haulage jolts.*\* Aug 20

## Boron

industrial minerals review.\* Jun 29  
technology reprocesses borate re-  
serves. Nov 14

## Brazil

Brazilian copper mine planned. Jun 17  
columbium plant commissioned.  
Aug 13

CVRD acquires stake in iron ore com-  
pany. Jul 15

CVRD plans expansion. Mar 12  
diamond exploration proceeds. Feb 7

gets financing to expand aluminum  
plant. Jul 28

large diamond found. Jan 13

PD, CVRD update copper-gold esti-  
mates. Apr 15

Bre-X, Felderhoff charged. Dec 4

Bridgestone/Firestone, Bush addresses  
mining executives. Aug 12

Brierley, J.A., *Expanding role of microbiol-  
ogy in metallurgical processes.*\*  
Nov 49

## British Columbia

Consol buys coal mine. Dec 6  
court revokes Redfern's mine permit.

Aug 13

Trail smelter to be reopened. Jun 17  
US wants to stop Canadian mine development. Jul 26

Sullivan Mine to close. Nov 22  
Brittan, M., *Using diagnostic process analysis to improve cash flow at Newmont's Carling Mill No. 4.* Jan 37

Broicher, H.F., *Bulk sorting by LIF: quality control of ores for bulk sorting and blending by laser-induced fluorescence analysis.* Sep 73

Bromine, industrial minerals review. Jun 31

Bucyrus International, shovel commissioned at oil sands mine. Apr 42  
*Building the East-West Cross Drift Tunnel at Yucca Mountain.* Fulcher, B., Eastlund, J., Copeland, J.B. Apr 19  
*Bulk sorting by LIF: quality control of ores for bulk sorting and blending by laser-induced fluorescence analysis.* Broicher, H.F. Sep 73

## C

Calcium carbonate, native corporation operates calcium carbonate mine. Jun 14

## California

annual review. May 61  
technology reprocesses borate reserves. Nov 14

Cambior, Arizona copper mine to be built. Jan 13

## Canada

annual review. May 109  
BC premier plans to help miners. Mar 9

Canadian Natural Resources, oil sands project planned. Apr 14

Consol buys British Columbian mine. Dec 6

court revokes Redfern's mine permit. Aug 13

diamond mine planned. Apr 15  
diamond mine refused land-use permit. Mar 11

Eskay Creek Mine and Mill. Jan 19  
Falconbridge declares force majeure. Nov 18

garnet plans sidetracked. Aug 13  
gold production begun at Red Lake. Sep 44

Inco acquires more of Voisey's Bay. Oct 16

Inco to develop nickel deposit. Jul 11  
magnesium plant begins production. Dec 13

oil sands liner system. Oct 28  
oil sands project planned. Apr 14  
reserves increase at Red Lake. Feb 13  
Sullivan Mine to close. Nov 22  
Trail smelter to be reopened. Jun 17  
US miners earn more. Mar 8  
US wants to stop Canadian mine development. Jul 26

Winspear rejects De Beers' takeover bid. Aug 12

zinc plant to be enlarged. Jan 9  
Canty, M., *Integrated bioreactor system for the treatment of cyanide, metals and nitrates in mine process water.* Sep 84

## Canyon Resources

Canyon sues Montana over cyanide ban. May 18

Canyon offers property to environmental groups. Jul 18

## Caterpillar

day at Tinaja Hills. Dec 35  
dozers add performance features. Apr 40

*Caterpillar's MINExpo exhibit includes a day at Tinaja Hills.* S. Kral. Dec 35

Carder, C., *Foamed grout controls underground coal-mine fire.* Sep 58

Cavendar, B., *Rethinking the use of new technology to improve operational performance.* Dec 61

## Cement

aluminum dome stores limestone. Jan 32

coal ash recycle into cement product. Nov 17

industrial minerals review. Jun 33

Chemicals, Degussa's CyPlus packaging reduces waste. Sep 66

## Chile

Aur gets financing for Quebrada Blanca. Aug 9

belt weigher aids Chilean salt mining. Sep 65

Chilean copper production to increase. Nov 4

Chilean gold reserves increased. Feb 9

Codelco triples pretax profits. Sep 18  
copper project to be built. Jan 7  
iodine property developed. Nov 15  
Los Pelambres increases output. Oct 14

Quebrada Blanca deal his roadblock. Apr 11

SX/EW plant planned. Jun 18

## China

China drops silver-trade restrictions. Mar 4

China and East Asia mining. Jun 94  
Chinese lead-zinc joint venture formed. Jul 23

China copper mine to reopen. Jul 29  
major coal player. Apr 8  
new contracts for phosphate shipments. May 24

118 killed in Chinese explosion. Nov 21

*China and East Asia — potential resources, specific projects.* Yernberg, W.R.; Jun 94

Chromite, industrial minerals review. Jun 35

*CIM and PDAC — South African gold; mining in a dot.com world.* Kral, S. Jul 43

CIS, light metals production outpaces demand. Feb 12

CIT Equipment Financing, aggregates production will level off. Sep 34

Clark, P., *Integrated bioreactor system for the treatment of cyanide, metals and nitrates in mine process water.* Sep 84

## Clean air

air regulations go to Supreme Court. Dec 6

coal project will burn municipal waste. Feb 10

court rules against industry in emissions case. Apr 6

emissions credits for carbon sinks. Sep 8

EPA prohibited from funding Kyoto measures. Nov 6

measure would create pollution-reduction program. Nov 6

Supreme Court decides clean air and costs. Jul 6

## Clean coal technology

NCC to study improve coal burning. Dec 6

Pennsylvania coal waste converted to liquid fuel. Jul 13

## Clean water

AMD treatment technology introduced. Sep 19

copper mine overhauls water system. Mar 36

EPA bypasses Congress in clean water regulations. Aug 5

improvements in AMD technology. Sep 67

integrated bioreactor system. Sep 84

measure would create pollution-reduction program. Nov 6

mountaintop-removal mining. May 6

predicting mine pit-lake water quality. Oct 59

water pollution case settled. Jun 17

wetlands regulations would hurt mining. Sep 8

## Cleveland-Cliffs

grinding improvements at Tilden concentrator. Feb 41

modeling software at Empire Mine. Sep 47

Northshore wins safety award. Jun 15

## Clinton, B.

bailout plan not enough for UMWA fund. Oct 6

mining being pushed off public lands. Jan 33

new national monuments created. Feb 6

proposes environmental assessments. Aug 5

2001 budget focuses on Lands Legacy Initiative. Apr 6

## Closures

closures help copper prices improve. Jan 35

Homestake Mine to close. Oct 17

Rosebud Mine to close. Jul 21

Sullivan Mine to close. Nov 22

## CMA

challenges of the new century. Feb 28

Colorado coal mines produce record amounts. Apr 15

## Coal industry leaders meet to discuss methane issues.

Yernberg, W.R. Jul 59

## Coal

118 killed in Chinese explosion. Nov 21

2001 growth slow. Jul 12

81 killed in explosion. Apr 16

a misunderstood industry. Jan 7

Anglo American buys Shell Coal. Jul 12

annual review. May 48

Black Beauty builds Illinois coal mine. Oct 13

BLM auctions underground coal leases. Jul 28

China major coal player. Apr 8

Coal adds \$12 billion to Pennsylvania's economy. Apr 14

coal ash recycled into cement product. Nov 17

coal mine ships half a billion tons. Mar 7

coal project will burn municipal waste. Feb 10

coal supply contract signed. Feb 12

Colorado coal mines produce record amounts. Apr 15

Consol buys British Columbian mine.

Dec 6  
 court rules against industry in emissions case. Apr 6  
 decade of growth for western coal., Oct 4  
 domestic energy use promoted. Jul 24  
 dredges aid in coal mine tailings reprocessing. Apr 41  
 e-marketplace planned. Dec 6  
 energy demand continues to grow. May 14  
 EPRI launches Global Coal Initiative. Nov 4  
 foamed grout controls underground fire.\* Sep 58  
 ground control and worker safety in coal mines.\* Jun 110  
 group promotes increased coal use. Oct 6  
 Josephine Roche history.\* Mar 38  
 leaders discuss methane issues.\* Jul 59  
 mountaintop-removal controversy slows coal mining.\* Sep 53  
 mountaintop-removal mining. May 6  
 Nacco buys US properties. Dec 6  
 MSHA considers taking over coal dust sampling. Aug 5  
 NCC to study improved coal burning. Dec 6  
 new company to be formed. Jan 4  
 NMA part of coal dust dispute. May 6  
 Pacific coking coal markets improve. Aug 10  
 Peabody seeks to maximize value of Australian assets. Sep 26  
 Peabody signs labor deal. Oct 16  
 Peabody to develop Kentucky coal mine. Jul 12  
 Peabody wins reclamation, safety awards. May 22  
 Pennsylvania coal waste converted to liquid fuel. Jul 13  
 Powder River coalbed methane reserves updated. Sep 33  
 production records set. Jul 28  
 productivity up, prices down. May 4  
 site development over an abandoned coal mine.\* Oct 31  
 South African company formed. Dec 6  
 surface mine reclamation awards. Jan 12  
 two miners killed in Utah. Sep 40  
 ventilation plan approved for West Elk Mine. Jul 27  
 West Elk Mine returns to production. Sep 40  
 Wyoming coal producers face new tax. Apr 16  
 Wyoming coal production may decrease. Aug 10  
 Wyoming coal sets another record. Apr 4  
 Wyoming coal workers reach settlement. Sep 40

**Coalbed methane**  
 coal leaders discuss methane issues.\* Jul 59  
 Phillips increases coalbed methane reserves. Nov 21  
 Powder River coalbed methane reserves updated. Sep 33

**Cobalt**  
 cobalt, copper mine planned for Uganda. Nov 22  
 copper-cobalt mine planned for Zambia. Oct 17  
 Codelco, triples pretax profits. Sep 18  
 Cœur d'Alene Mines, Chilean gold re-

serves increased. Feb 9  
 Colaizzi, G.J., *Foamed grout controls underground coal-mine fire.*\* Sep 58  
 Colinet, J.F., *Silica collection concerns when using flooded-bed scrubbers.*\* Apr 49

**Colombia**  
 conveyors supplied to Colombian plant. Feb 13  
 political-risk management in northern Andes.\* Oct 34  
 Colorado miners discuss challenges of the new century.\* Kral, S. Feb 28

**Colorado**  
 annual review.\* May 64  
 challenges of the new century.\* Feb 28  
 coal mines produce record amounts. Apr 15  
 Cresson reserves increase. May 19  
 cyanide ban fails to make ballot. Sep 36  
 cyanide initiative wording changed. Jun 6  
 diamond company files for bankruptcy. Mar 14  
 foamed grout controls underground fire.\* Sep 58  
 Henderson workforce cut by 110. Jan 8  
 Idarado property sold as open space. Nov 16  
 mining valued at \$2.84 billion. Aug 10  
 soda ash facility opens. Nov 13  
 ventilation plan approved for West Elk Mine. Jul 27  
 voters may decide cyanide's use in mining. May 18  
 water pollution case settled. Jun 17  
 West Elk Mine returns to production. Sep 40  
 Columbian, columbian plant commissioned. Aug 13  
 Comet Resources, lateritic nickel deposit to be developed. Sep 40

**Cominco**  
 board rejects Teck's offer. Sep 42  
 negotiates for Iranian zinc deposit. Jul 29  
 Pasminco buys into Peruvian zinc project. Sep 23  
 Pend Oreille zinc mine to reopen. Aug 14  
 Quebrada Blanca deal his roadblock. Apr 11  
 Red Dog to increase production. Mar 14  
 reopens Pend Oreille Mine. Oct 14  
 Sullivan Mine to close. Nov 22  
 sustainable development at Red Dog.\* Nov 25  
 Teck to increase interest in Cominco. Aug 14  
 Trail smelter to be reopened. Jun 17  
 Common clay and shale, industrial minerals review.\* Jun 35  
 Compania Minera Disputada de Las Condes, SX/EW plant planned. Jun 18

**Company reports**  
 AngloGold production improves. Sep 31  
 Barrick's earnings increase. Mar 8  
 BHP records record profits. Sep 25  
 Codelco triples pretax profits. Sep 18  
 gold program pays off for Barrick. Sep 31  
 Newmont increases cash flow. Sep 17  
 Newmont's profits increase. Mar 7

**Computers**  
 IBM computers speed up with copper.

Mar 4  
 industry challenged to find more gold at Red Lake Mine. May 24  
 mine modeling software for less than \$1,000.\* Apr 32  
 mineral databases combined on CDs. Sep 4  
 mining companies buy, sell equipment online. Jun 16  
 modeling software at Empire Mine. Sep 47  
 monitoring truck-haulage jolts.\* Aug 20  
 online exchange started for industrial minerals. Jun 16  
 online presentation aids teaching.\* Nov 42  
 remote-control monitoring cuts maintenance costs.\* Aug 15  
 software aids oil-sands plant upgrade. Mar 37  
 software improves spatial modeling. Oct 40

**Congress**  
 2001 budget focuses on Lands Legacy Initiative. Apr 6  
 bill authorizes Corp of Engineers to clean up abandoned mines. May 6  
 bill requires congressional approval for monument designation. Jul 6  
 bill prohibits use of funds for Kyoto protocol. Jul 6  
 bill reduces capital gains tax on precious metals. Oct 6  
 BLM limited on rulemaking for public lands. Nov 6  
 EPA bypasses Congress in clean water regulations. Aug 5  
 EPA prohibited from funding Kyoto measures. Nov 6  
 helpful to mining? Dec 4  
 measure would create pollution-reduction program. Nov 6

**Construction**  
 aggregates consolidation to continue. May 13  
 aggregates production will level off. Sep 34  
 US construction expected to decline. Feb 11  
 Construction aggregates, industrial minerals review.\* Jun 36

**Conveyors**  
 belt precleaner cuts production costs. Sep 65  
 belt weigher aids Chilean salt mining. Sep 65  
 clamps help reduce conveyor maintenance. Mar 34  
 Europe's longest. Sep 64  
 secondary cleaner adds to belt efficiency. Jan 31  
 stationary conveyors offered for mines. Nov 23  
 supplied to Colombian plant. Feb 13  
 telescoping conveyor available for aggregates industry. Nov 23  
 Copeland, J.B., *Building the East-West Cross Drift Tunnel at Yucca Mountain.*\* Apr 19

**Copper**  
 Alumbra Mine cuts costs. Mar 11  
 Arizona copper mine to be built. Jan 13  
 Asian copper demand improves. Jan 10  
 Batu Hijau project is commissioned. Jan 4  
 Brazilian copper mine planned. Jun 17  
 Chilean copper production to increase.

Nov 4  
China copper mine to reopen. Jul 29  
closures help copper prices improve.\*  
Jan 35  
cobalt, copper mine planned for  
Uganda. Nov 22  
Codelco triples pretax profits. Sep 18  
copper adds to Arizona's economy.  
Jul 20  
copper-cobalt mine planned for Zam-  
bia. Oct 17  
economy strengthens, copper prices  
up. Feb 4  
electronic copper marketplace planned.  
Sep 32  
faster microprocessors use copper.  
Jan 4  
four years of copper growth. Sep 4  
German plant expansion begins.  
Nov 22  
Grasberg production increased. Jan 8  
IBM computers speed up with copper.  
Mar 4  
Kid Creek Mine deepest base metals  
mine. Sep 29  
Kvaerner to build BHP's copper project.  
Aug 14  
Laotian copper-gold project sold.  
Feb 13  
Los Pelambres increases output.  
Oct 14  
mine production increases. Mar 10  
Morenci converts copper production to  
leaching. Jan 36  
Ok Tedi may remain open. May 20  
Ok Tedi Mine should close. Apr 10  
PD, CVRD update copper-gold esti-  
mates. Apr 15  
Pebble Creek gets prospecting license.  
Sep 37  
Pebble Creek receives exploration  
license in India. Aug 11  
project to be built. Jan 7  
Quebrada Blanca deal his roadblock.  
Apr 11  
Sumitomo increases stake in nickel and  
copper. May 24  
SX/EW plant planned. Jun 18  
US wants to stop Canadian mine devel-  
opment. Jul 26  
Zambia completes privatization.  
May 17  
CoreMarkets, online service adds banking  
partner. Aug 8  
Corps of Engineers, wetlands regulations  
would hurt mining. Sep 8  
**Cortez Gold Mines**  
increases Pipeline production. Dec 6  
more gold found at Pipeline. Nov 21  
revises Pipeline estimates. Apr 10  
*Cover system to mitigate ARD in an arid  
climate — setup of field test plots at  
BHP Iron Ore's Mt. Whaleback oper-  
ation.\* O'Kane, M., Porterfield,  
D., Endersby, M., Haug, M.D.*  
Feb 51  
Cripple Creek & Victor Gold Mining,  
Cresson reserves increase. May 19  
Crown Resources, Crown Jewel receives  
unfavorable ruling. Mar 14  
**Crushing and grinding**  
grinding improvements at Tilden con-  
centrator.\* Feb 41  
maintaining ring gears in ball mills.\*  
Feb 15  
mobile crusher available in North  
America. Mar 39  
**CSR America**  
American Limestone sold. Jul 29

CSR America buys aggregates busi-  
ness. Aug 13  
CSR America buys another aggregates  
company. Sep 28

**CVRD**  
acquires stake in iron ore company.  
Jul 15  
Brazilian copper mine planned. Jun 17  
gets financing to expand aluminum  
plant. Jul 28  
PD, CVRD update copper-gold esti-  
mates. Apr 15

## D

Dayton Mining, moves into Nevada. Jul 18  
**De Beers**  
diamond recovery plant planned for  
South Africa. Apr 15  
tries to increase diamond demand.  
Sep 21  
Winspear rejects De Beers' takeover  
bid. Aug 12  
Winspear agrees to De Beers' take-  
over. Oct 15

**Deaths**  
118 killed in Chinese explosion.  
Nov 21  
Gary Howell passes away. Jun 11  
mine fatalities drop. Nov 17  
two miners killed in Utah. Sep 40  
*Deep cut: ground control and worker  
safety in coal mines.\* Baur, E.R.,  
Bise, C.J.* Jun 110  
Degussa, CyPlus packaging reduces  
waste. Sep 66  
Delta Gold, mining leases granted. Apr 16  
De Voto, R.H.: *Banning cyanide use at  
McDonald — an attack on open-pit  
mining.\** Dec 19  
*Development and scale-up of large flota-  
tion cells.\* Aribiter, N.* Mar 28

**Diamonds**  
De Beers tries to increase diamond  
demand. Sep 21  
diamond exploration proceeds. Feb 7  
diamond mine refused land-use permit.  
Mar 11  
diamond company files for bankruptcy.  
Mar 14  
diamond mine planned. Apr 15  
diamond recovery plant planned for  
South Africa. Apr 15  
gold, diamond plants to be modernized.  
May 20  
industrial minerals review.\* Jun 44  
large diamond found. Jan 13  
Namibia diamond production reduced.  
Sep 21  
Winspear rejects De Beers' takeover  
bid. Aug 12  
Winspear agrees to De Beers' take-  
over. Oct 15  
Diatomite, industrial minerals review.\*  
Jun 37

**Diavik**  
diamond mine refused land-use permit.  
Mar 11  
diamond mine planned. Apr 15  
gold, diamond plants to be modernized.  
May 20  
Diesels, diesel particulates in underground  
mines.\* Apr 60  
Dimension stone, industrial minerals re-  
view.\* Jun 38  
Discoveries, gold discovery reported in  
Papua New Guinea. Mar 9

**DOE**  
coal project will burn municipal waste.

Feb 10  
mine seismicity and nuclear test ban  
treaty.\* Mar 22  
NCC to study improved coal burning.  
Dec 6  
Rock imaging beyond the mine face.  
Aug 4  
state engineer denies Yucca Mountain  
permit. Mar 6  
Yucca Mountain's cross drift tunnel.\*  
Apr 19  
*Donald E. Ranta: an interview with the  
2000 SME president.\** Mar 17  
Draeger, breathing unit supplies four hours  
of air. Oct 40  
Dredging, aid in coal mine tailings repro-  
cessing. Apr 41  
Dreyer Award, how orebodies are found.\*  
Jul 31  
**Drift of things**  
Australians add local color to medals.  
Oct 4  
automated loading system tested.  
Sep 4  
Batu Hijau project is commissioned.  
Jan 4  
BHP affirms its minerals commitment.  
Aug 4  
BLM issues commodity pricing policy.  
Aug 4  
Britain adopts metric system. May 4  
Cannington could be largest silver  
mine. Jan 4  
Chilean copper production to increase.  
Nov 4  
China drops silver-trade restrictions.  
Mar 4  
decade of growth for western coal.  
Oct 4  
economy strengthens, copper prices  
up. Feb 4  
EPRI launches Global Coal Initiative.  
Nov 4  
faster microprocessors use copper.  
Jan 4  
fatalities trend down for decade. Feb 4  
four years of copper growth. Sep 4  
Georgia kaolin leads industry growth.  
Oct 4  
global warming gets a dose of science.  
Mar 4  
IBM computers speed up with copper.  
Mar 4  
many industrial minerals users see  
steady growth in recent years.  
Jun 4  
mineral databases combined on CDs.  
Sep 4  
mining still largest explosives  
market. Nov 4  
productivity up, prices down. May 4  
proposed constitutional amendment  
would effectively ban precious  
metals mining in Colorado. Jul 4  
review shows strong economy that  
boosts metals and industrial  
minerals. May 4  
rock imaging beyond the mine face.  
Aug 4  
SME elects officers and directors. Apr 4  
USGS offers extended metals profiles.  
Feb 4  
Wyoming coal sets another record.  
Apr 4  
**Drilling**  
Atlas Copco introduces exploration  
drilling rig. Sep 64  
effect of additives on drilling in hard  
rock.\* Jan 48

Dummett, H.T., *Minerals resource development, our new challenges.*\* Jul 37  
Dunlop Enerka Belting, conveyor is Europe's longest. Sep 64

## E

East, D.R., *Tailings dam failures — Why do they continue to occur?*\* Dec 57  
Eastlund, J., *Building the East-West Cross Drift Tunnel at Yucca Mountain.*\* Apr 19

## E-commerce

coal marketplace planned. Dec 6  
electronic copper marketplace planned. Sep 32  
equipment available online. Nov 20  
mining companies buy, sell equipment online. Jun 16  
online exchange started for industrial minerals. Jun 16  
online service adds banking partner. Aug 8  
online minerals marketplace nears startup. Sep 32  
Stevenson named head of online marketplace. Jul 27

## Economics

acquisitions increase AngloGold's output. May 14  
aggregates production will level off. Sep 34  
Alumbrera Mine cuts costs. Mar 11  
Asian copper demand improves. Jan 10  
Australian gold mine reopens. Jan 10  
BHP records record profits. Sep 25  
cash flow improvements at Carlin No. 4 mill.\* Jan 37  
China and East Asia mining.\* Jun 94  
CIS light metals production outpaces demand. Feb 12  
Coal adds \$12 billion to Pennsylvania's economy. Apr 14  
coal's 2001 growth slow. Jul 12  
Colorado mining valued at \$2.84 billion. Aug 10  
copper adds to Arizona's economy. Jul 20  
De Beers tries to increase diamond demand. Sep 21  
economy strengthens, copper prices up. Feb 4  
electronic copper marketplace planned. Sep 32  
exploration spending nearing bottom of cycle. Dec 14  
Europe's deepest mine expanded. Jan 10  
four years of copper growth. Sep 4  
garnet demand to increase 3% to 5% a year. Sep 30  
gold's performance will depend on investors. Dec 12  
gold program pays off for Barrick. Sep 31  
Henderson workforce cut by 110. Jan 8  
how things change without any change. Jan 16  
internal rate of return in project ranking.\* Nov 60  
internal rate of return project evaluation technique flawed.\* Aug 49  
Kyoto protocol would cause oil prices to increase. Apr 6  
mine production increases. Mar 10  
mining adds \$3.31 billion to Nevada's economy. Feb 8  
mining in a dot.com world.\* Jul 43  
mining's economic dilemma. May 14  
Morenci converts copper production to

leaching. Jan 36  
Nevada best place for mining investment. Jan 9  
Newmont increases cash flow. Sep 17  
oil drilling drives barite demand. Mar 12  
Ok Tedi may remain open. May 20  
Ok Tedi Mine should close. Apr 10  
Oklahoma produced \$408 million in industrial minerals. Jun 14  
online minerals marketplace nears startup. Sep 32  
Pacific coking coal markets improve. Aug 10  
palladium price increases. Mar 10  
platinum, palladium prices increase in 2000. Aug 8  
platinum, palladium demand outstrips supply. Dec 7  
production cuts helps nickel price. Feb 7  
sagging gold price lowers Nevada's production. Nov 18  
silver supply cannot keep up with demand. Jul 22  
strengthened prices heighten investor interest. May 13  
sub-Saharan Africa remains risky. Oct 11  
Sunshine files for bankruptcy. Oct 17  
tax reform plan targets mining. Feb 6  
US construction expected to decline. Feb 11  
valuing publicly traded mining companies.\* Feb 25  
zinc studies proceed. Feb 9  
ecopper.com, electronic copper marketplace planned. Sep 32  
Ecuador, political-risk management in northern Andes.\* Oct 34  
Education, online presentation aids teaching.\* Nov 42  
*Effect of additives on drilling hard rock.\**  
H. El-Shall, R. Haecker, Somasundaran, P., Gupta, S. Jan 48  
Eger, P., *Using passive treatment systems for mine closure — a good approach or a risky alternative.\**  
Sep 78  
EIA, energy demand continues to grow. May 14  
*Eight to inducted into National Mining Hall of Fame.\** Aug 43  
El-Shall, H., *Effect of additives on drilling in hard rock.\** Jan 48  
Endersby, M., *Cover system to mitigate ARD in an arid climate — setup of field test plots at BHP Iron Ore's Mt. Whaleback operation.\** Feb 51  
*Environmental benefits of using clay granules in pesticide applications.\** Taylor, D.R., Goss, R.G. Nov 54  
**Environment**  
AMD treatment technology introduced. Sep 19  
aquatic mapping services available. Jan 30  
ARD mitigation at Mt. Whaleback.\* Feb 51  
benefits of clay granules in pesticides.\* Nov 54  
bill authorizes Corp of Engineers to clean up abandoned mines. May 6  
bill prohibits use of funds for Kyoto protocol. Jul 6  
Canyon offers property to environmental groups. Jul 18

clean air case goes to Supreme Court. Dec 6  
Clinton proposes environmental assessments. Aug 5  
coal ash recycled into cement product. Nov 17  
copper mine overhauls water system. Mar 36  
court revokes Redfern's mine permit. Aug 13  
Crown Jewel receives unfavorable ruling. Mar 14  
cyanide initiative wording changed. Jun 6  
cyanide ban in Montana.\* Dec 19  
design flaws contribute to tailings dam failure. Jun 12  
dredges aid in coal mine tailings reprocessing. Apr 41  
EPA bypasses Congress in clean water regulations. Aug 5  
EPA prohibited from funding Kyoto measures. Nov 6  
Forest Service emphasizes conservation. Mar 6  
Forest Service road building ban. Dec. 6  
Freeport stabilizes Grasberg stockpile. Aug 13  
global warming gets a dose of science. Mar 4  
good neighbor agreement breaks down. May 24  
Greek gold mine gets environmental approval. Nov 19  
Idarado property sold as open space. Nov 16  
improvements in AMD technology.\* Sep 67  
integrated bioreactor system.\* Sep 84  
Kyoto protocol would cause oil prices to increase. Apr 6  
measure would create pollution-reduction program. Nov 6  
mining being pushed off public lands.\* Jan 33  
mountaintop-removal controversy slows coal mining.\* Sep 53  
mountaintop-removal mining. May 6  
new national monuments created. Feb 6  
oil sands liner system.\* Oct 28  
Ok Tedi may remain open. May 20  
Ok Tedi Mine should close. Apr 10  
Peabody wins reclamation, safety awards. May 22  
plane applies dust suppression. Oct 42  
predict pit lake filling rates.\* Mar 53  
predicting mine pit-lake water quality.\* Oct 59  
proposed constitutional amendment would effectively ban precious metals mining in Colorado. Jul 4  
Stillwater signs good neighbor agreement. Feb 10  
Supreme Court decides clean air and costs. Jul 6  
tailings and mine waste.\* Jun 97  
tailings spill damaged assessed. Apr 9  
TRI lists mining as leading polluter. Jun 6  
water pollution case settled. Jun 17  
wetlands regulations would hurt mining. Sep 8  
why tailings dam failures occur.\* Dec 57  
workers missing after tailings overflow. Jun 12

Yucca Mountain's cross drift tunnel.\*  
Apr 19

## EPA

bypasses Congress in clean water regulations. Aug 5  
clear air case goes to Supreme Court. Dec 6  
court rules against industry in emissions case. Apr 6  
mountaintop-removal controversy slows coal mining.\* Sep 53  
mountaintop-removal mining. May 6  
prohibited from funding Kyoto measures. Nov 6  
TRI lists mining as leading polluter. Jun 6  
wetlands regulations would hurt mining. Sep 8

EPRI, launches Global Coal Initiative. Nov 4

## Equipment

300-t mining truck introduced.\* Jan 26  
articulated dump truck introduced. Jan 32  
Atlas Copco introduces exploration drilling rig. Sep 64  
belt precleaner cuts production costs. Sep 65  
clamps help reduce conveyor maintenance. Mar 34  
conveyor is Europe's longest. Sep 64  
conveyors supplied to Colombian plant. Feb 13  
diesel particulates in underground mines.\* Apr 60  
dozers add performance features. Apr 40  
equipment available online. Nov 20  
excavators designed for confined spaces. Sep 63  
GE supplies dragline electrical systems. Aug 23  
Komatsu loader designed for quarry use. Jan 29  
Krebs has cyclones available. Nov 41  
MINExpo 2000 held in Las Vegas.\* Aug 25  
mining companies buy, sell equipment online. Jun 16  
mobile crusher available in North America. Mar 39  
new LHD available. Oct 38  
pump testing improves wear life. Mar 36  
roofbolt offers long-term support. Aug 42  
secondary cleaner adds to belt efficiency. Jan 31  
shovel commissioned at oil sands mine. Apr 42  
stationary conveyors offered for mines. Nov 23  
telescoping conveyor aggregates industry. Nov 23

*Eskay Creek Mine and Mill — a continuing success.\** Biles, G., Anand, R., Loughran, K. Jan 19

ESRI, software improves spatial modeling. Oct 40

*Estimation of diesel particulate concentrations in underground mines.\** Haney, R.A., Saseen, G.P. Apr 60

*Expanding role of microbiology in metallurgical processes.\** Brierley, J.A. Nov 49

## Expansions

CVRD plans expansion. Mar 12  
Europe's deepest mine expanded. Jan 10

fertilizer complex to be expanded.

Feb 13  
German plant expansion begins. Nov 22

gets financing to expand aluminum plant. Jul 28  
gold, diamond plants to be modernized. May 20

Kid Creek Mine deepest base metals mine. Sep 29  
Kvaerner to build BHP's copper project. Aug 14

Los Pelambres increases output. Oct 14  
Murrin Murrin to expand. Jul 27

Murrin Murrin increases production. Dec 15  
perlite consumption expected to increase. May 22

perlite plant expanded. Jan 14  
Red Dog to increase production. Mar 14

Rio Tinto increases production for most commodities. Mar 13  
soda ash expansion begins. Nov 22

SX/EW plant planned. Jun 18  
TBMs reach Stillwater's J-M Reef. Aug 8

zinc plant to be enlarged. Jan 9

## Exploration

Anaconda, Gold Fields form exploration alliance. Oct 19  
annual review.\* May 38

Atlas Copco introduces exploration drilling rig. Sep 64  
BC premier plans to help miners. Mar 9

Chilean gold reserves increased. Feb 9  
claim staking improved in Alaska. Jul 26

Cominco negotiates for Iranian zinc deposit. Jul 29  
Cortez revises Pipeline estimates. Apr 10

Cresson reserves increase. May 19  
diamond exploration proceeds. Feb 7

drilling at Pogo deposit. Sep 42  
gold discovery reported in Papua New Guinea. Mar 9

gold reserves increase at Argentina deposit. Jun 13  
gold reserves increased at Tanzanian project. Nov 13

Hecla moves ahead with Mexican property. Jul 15  
Highlands Pacific gets PNG exploration permit. Sep 29

how orebodies are found.\* Jul 31  
industry challenged to find more gold at Red Lake Mine. May 24

industry shows interest in Mali gold. Nov 19  
minerals resource development.\* Jul 37

more gold found at Pipeline. Nov 21  
Nevada best place for mining investment. Jan 9

Noranda's exploration strategy.\* Apr 55  
Outokumpu, Gold Fields find gold. Oct 19

Pasminco buys into Peruvian zinc project. Sep 23  
Pebble Creek gets prospecting license. Sep 37

Pebble Creek receives exploration license in India. Aug 11  
reserves increase at Red Lake. Feb 13

Rio Algom explores for Irish zinc. Jun 13

13

spending nears bottom of cycle. Dec 14  
study reassesses exploration vs. acquisition. Nov 16  
Tonkin Springs drilling. Sep 42  
Veladero reserves increase. May 19

## F

### Falconbridge

BHP, Falconbridge in nickel joint venture. Aug 14  
declares force majeure. Nov 18  
Kid Creek Mine deepest base metals mine. Sep 29  
Noranda gains control of Falconbridge. Sep 28

Feiler, J.J., *Foamed grout controls underground coal-mine fire.\** Sep 58  
Feldspar, industrial minerals review.\* Jun 38

### Finland

Europe's deepest mine expanded. Jan 10  
Outokumpu, Gold Fields find gold. Oct 19

Flexible Steel Lacing, belt precleaner cuts production costs. Sep 65  
Flotation, development of large flotation cells.\* Mar 28

Fluor Daniel, retribution sought from Fluor Daniel. Sep 44  
Fluorspar, industrial minerals review.\* Jun 40

*Foamed grout controls underground coal-mine fire.\** Feiler, J.J., Colaizzi, G.J., Carder, C. Sep 58

### Franco-Nevada

Gold Fields, Franco-Nevada agree to merger. Jul 25  
Gold Fields, Franco-Nevada merger blocked. Nov 15

### Freeport-McMoRan

agrees on improved relations with tribes. Nov 20  
garnet plans sidetracked. Aug 13

Grasberg production increased. Jan 8  
stabilizes Grasberg stockpile. Aug 13  
workers missing after tailings overflow. Jun 12

Fulcher, B., *Building the East-West Cross Drift Tunnel at Yucca Mountain.\** Apr 19

Fuller's earth, industrial minerals review.\* Jun 40

## G

Ganguli, R., *Online presentation aids classroom teaching.\** Nov 42

### Garnet

garnet plans sidetracked. Aug 13  
garnet demand to increase 3% to 5% a year. Sep 30

Gemstones, industrial minerals review.\* Jun 41  
General Electric, supplies electrical systems for draglines. Aug 23

Georgia kaolin: development of a leading industrial mineral.\* Pruett, R.J. Oct 21

### Georgia

development of Georgia kaolin. Oct 21  
Georgia kaolin leads industry growth. Oct 4

Gibbs, B.L., *Mine modeling software for less than \$1,000 — usefulness and limitations.\** Apr 32

Gibbs, R., *Acceleration and GPS data monitor truck-haulage jolts.\** Aug 20  
Glencore International, vanadium mine

opens. Jun 17  
 Global warming, global warming gets a dose of science. Mar 4

**Gold**  
 acquisitions increase AngloGold's output. May 14  
 Ahsanti pours gold at Geita. Jul 25  
 Alumbra Mine cuts costs. Mar 11  
 Anaconda, Gold Fields form exploration alliance. Oct 19  
 AngloGold buys interest in Mali mine. Aug 14  
 AngloGold production improves. Sep 31  
 Aur gets financing for Quebrada Blanca. Aug 9  
 Australian gold mine reopens. Jan 10  
 Australians add local color to medals. Oct 4  
 Batu Hijau project is commissioned. Jan 4  
 bill reduces capital gains tax on precious metals. Oct 6  
 Canyon sues Montana over cyanide ban. May 18  
 cash flow improvements at Carlin No. 4 mill. Jan 37  
 Chilean gold reserves increased. Feb 9  
 Cortez revises Pipeline estimates. Apr 10  
 Cortez increases Pipeline production. Dec 6  
 Cresson reserves increase. May 19  
 Crown Jewel receives unfavorable ruling. Mar 14  
 cyanide initiative wording changed. Jun 6  
 cyanide ban in Montana. Dec 19  
 drilling at Pogo deposit. Sep 42  
 Eskay Creek Mine and Mill. Jan 19  
 Geita gold mine begins production. Sep 16  
 gold discovery reported in Papua New Guinea. Mar 9  
 Gold Fields, Franco-Nevada agree to merger. Jul 25  
 gold production begun at Red Lake. Sep 44  
 gold program pays off for Barrick. Sep 31  
 gold reserves increased at Tanzanian project. Nov 13  
 gold, diamond plants to be modernized. May 20  
 Grasberg production increased. Jan 8  
 Greek gold mine gets environmental approval. Nov 19  
 Homestake Mine to close. Oct 17  
 industry challenged to find more gold at Red Lake Mine. May 24  
 industry shows interest in Mali gold. Nov 19  
 Laotian copper-gold project sold. Feb 13  
 Mali gold mine to be developed. Apr 7  
 Minahasa stays open. May 15  
 mining adds \$3.31 billion to Nevada's economy. Feb 8  
 mining leases granted. Apr 16  
 more gold found at Pipeline. Nov 21  
 Nevada best place for mining investment. Jan 9  
 Newmont increases cash flow. Sep 17  
 Pangea agrees to Barrick's takeover bid. Aug 9  
 PD, CVRD update copper-gold estimates. Apr 15  
 Pebble Creek gets prospecting license.

Sep 37  
 Pebble Creek receives exploration license in India. Aug 11  
 performance will depend on investors. proposed constitutional amendment would effectively ban precious metals mining in Colorado. Jul 4  
 reserves increase at Argentina deposit. Jun 13  
 reserves increase at Red Lake. Feb 13  
 Rosebud Mine to close. Jul 21  
 royalty agreement revised. Mar 14  
 sagging gold price lowers Nevada's production. Nov 18  
 spill injures eight at Yanacocha. Jul 19  
 tailings spill damaged assessed. Apr 9  
 Tonkin Springs drilling. Sep 42  
 unrest threatens gold mine. Jul 22  
 US wants to stop Canadian mine development. Jul 26  
 Veladero reserves increase. May 19  
 Wallaby mine to be developed. Dec 12  
 water pollution case settled. Jun 17  
 Yanacocha gold exports to increase. Aug 11

#### Gold Fields

Gold Fields, Franco-Nevada merger blocked. Nov 15  
 Outokumpu, Gold Fields find gold. Oct 19

#### Goldcorp

industry challenged to find more gold at Red Lake Mine. May 24  
 reserves increase at Red Lake. Feb 13  
 Goodrich, R.R., *Two-seam mining stability at OCl's Big Island trona mine.* Apr 27  
 Goss, R.G., *Environmental benefits of using clay granules in pesticide applications.* Nov 54  
 gold production begun at Red Lake. Sep 44  
 GPS, monitoring truck-haulage jolts. Aug 20

#### Grasberg

Freeport stabilizes Grasberg stockpile. Aug 13  
 Freeport agrees on improved relations with tribes. Nov 20  
 Grasberg production increased. Jan 8  
 workers missing after tailings overflow. Jun 12  
 Greece, gold mine gets environmental approval. Nov 19

#### Greenhouse gas emissions

bill prohibits use of funds for Kyoto protocol. Jul 6  
 emissions credits for carbon sinks. Sep 8  
 Kyoto protocol would cause oil prices to increase. Apr 6  
 Greystar Resources, political-risk management in northern Andes. Oct 34  
 Ground control, and worker safety in coal mines. Jun 110  
 Grupo Mexico, wants to trade on US exchanges. Sep 19  
 Gypsum, industrial minerals review. Jun 42  
 Gupta, S., *Effect of additives on drilling hard rock.* Jan 48

#### H

Haecker, R., *Effect of additives on drilling in hard rock.* Jan 48  
 Hajdasinski, M.M., *Internal rate of return — a flawed and dysfunctional project-evaluation criterion.* Aug 49

Hajdasinski, M.M., *Internal rate of return as a project-ranking tool.* Nov 60  
 Haney, R.A., *Estimation of diesel particulate concentrations in underground mines.* Apr 60  
 Hanson, bids for aggregates company. Jan 14  
 Haug, M.D., *Cover system to mitigate ARD in an arid climate — setup of field test plots at BHP Iron Ore's Mt. Whaleback operation.* Feb 51  
 Haulage, mine-shaft conveyance monitoring. Oct 55

**Health and safety**  
 118 killed in Chinese explosion. Nov 21  
 81 killed in explosion. Apr 16  
 better equipment proposed for miners. Feb 8  
 breathing unit supplies four hours of air. Oct 40  
 Canyon sues Montana over cyanide ban. May 18  
 diesel particulates in underground mines. Apr 60  
 fatalities trend down for decade. Feb 4  
 foamed grout controls underground fire. Sep 58  
 ground control and worker safety in coal mines. Jun 110  
 improved longwall-dust control. Mar 45  
 Long-term subsidence associated with longwall mining. Oct 49  
 mine fatalities drop. Nov 17  
 MSHA considers taking over coal dust sampling. Aug 5  
 Nevada miners to get increased training. Jul 19  
 NMA part of coal dust dispute. May 6  
 NMA, MSHA safety awards announced. Oct 16  
 Peabody wins reclamation, safety awards. May 22  
 plane applies dust suppressant. Oct 42  
 regulations need to be updated. Nov 6  
 rock bolt tester improves mine safety. Jul 63  
 roof monitoring at stone mines. Nov 32  
 Sentinels of Safety awards announced. Jan 12  
 silica concerns when using flooded-bed scrubbers. Apr 49  
 two miners killed in Utah. Sep 40  
 underground warning system signals emergencies. Mar 35  
 voters may decide cyanide's use in mining. May 18  
 West Elk Mine returns to production. Sep 40

**Heap leaching**  
 Canyon sues Montana over cyanide ban. May 18  
 Colorado cyanide ban fails to make ballot. Sep 36  
 cyanide initiative wording changed. Jun 6  
 proposed constitutional amendment would effectively ban precious metals mining in Colorado. July 4  
 voters may decide cyanide's use in mining. May 18

**Hecla Mining**  
 may sell industrial minerals unit. Sep 30

moves ahead with Mexican property. Jul 15  
 Rosebud Mine to close. Jul 21  
 Hiebert, R., *Integrated bioreactor system for the treatment of cyanide, metals and nitrates in mine process water.*\* Sep 84  
 Highlands Pacific, gets PNG exploration permit. Sep 29  
 Hindustan Aluminium, Indian aluminum project privatized. Sep 44  
 Hollinshead, W.L., *Automated guidance systems for underground machines: Can they benefit my future project?*\* Dec 68  
**Homestake Mining**  
 Eskay Creek Mine and Mill.\* Jan 19  
 gold reserves increase at Argentina deposit. Jun 13  
 Homestake Mine to close. Oct 17  
 Veladero reserves increase. May 19  
 Horswill, D.H., *Mining and sustainable development at Red Dog.*\* Nov 25  
 Houston, T.E., *Josephine Roche: coal mining executive, labor advocate.*\* Mar 38  
*How orebodies are found.*\* Lowell, J.D. Jul 31  
 HPT Research, AMD treatment technology introduced. Sep 19  
 Hudson, A.J., *Passive means to detect hot trolley insulators.*\* Jan 43  
 Hudson Bay Mining, zinc plant to be enlarged. Jan 9  
*Improvements seen in acid-mine-drainage technology.*\* Yernberg, W.R. Sep 67  
*Integrated bioreactor system for the treatment of cyanide, metals and nitrates in mine process water.*\* M. Canty, M., Hiebert, R., Thompson, L., Clark, P., Beckman, S. Sep 84

## I

Iannacchione, A.T., *Roof monitoring helps prevent injuries at stone mines.*\* Nov 32  
 Idaho, annual review.\* May 67  
 Idarado Mining, Idarado property sold as open space. Nov 16

## Illinois

1999 mining activities. Sep 39  
 Black Beauty builds Illinois coal mine. Oct 13  
 coal production records set. Jul 28  
 site development over an abandoned coal mine.\* Oct 31

## IMC Global

phosphate fertilizer production curtailed. Aug 14  
 reduces phosphate production. Dec 16  
 Iminex, online exchange started for industrial minerals. Jun 16

## Inco

acquires more of Voisey's Bay. Oct 16  
 to develop nickel deposit. Jul 11

## India

increases zinc, aluminum production. Jul 16  
 Indian aluminum project privatized. Sep 44  
 Pebble Creek receives exploration license in India. Aug 11  
 Pebble Creek gets prospecting license. Sep 37

Indiana, annual review.\* May 70

## Indonesia

Batu Hijau project is commissioned. Jan 4  
 BHP, Falconbridge in nickel joint ven-

ture. Aug 14  
 China major coal player. Apr 8  
 Freeport stabilizes Grasberg stockpile. Aug 13  
 Grasberg production increased. Jan 8  
 Minahasa stays open. May 15  
 Newmont's community work attacked. Jun 12  
 workers missing after tailings overflow. Jun 12  
 Industrial diamond, industrial minerals review.\* Jun 44  
 Industrial garnet, industrial minerals review.\* Jun 46  
**Industrial minerals**

aggregates consolidation to continue. May 13  
 aggregates production will level off. Sep 34  
 alumina.\* Jun 28  
 aluminum dome stores limestone. Jan 32  
 American Limestone sold. Jul 29  
 ball clay.\* Jun 28  
 bauxite.\* Jun 28  
 belt weigher aids Chilean salt mining. Sep 65  
 benefits of clay granules in pesticides.\* Nov 54  
 boron.\* Jun 29  
 bromine.\* Jun 29  
 cement.\* Jun 33  
 chormite.\* Jun 35  
 CIS light metals production outpaces demand. Feb 12  
 coal ash recycled into cement product. Nov 17  
 common clay and shale.\* Jun 35  
 construction aggregates.\* Jun 36  
 CSR America buys aggregates business. Aug 13  
 CSR America buys another aggregates company. Sep 28  
 development of Georgia kaolin. Oct 21  
 diatomite.\* Jun 37  
 dimension stone.\* Jun 38  
 feldspar.\* Jun 38  
 fertilizer complex to be expanded. Feb 13  
 fire clay.\* Jun 39  
 fluorspar.\* Jun 40  
 fuller's earth.\* Jun 40  
 garnet demand to increase 3% to 5% a year. Sep 30  
 garnet plans sidetracked. Aug 13  
 gemstones.\* Jun 41  
 Georgia kaolin leads industry growth. Oct 4  
 gypsum.\* Jun 42  
 Hanson bids for aggregates company. Jan 14  
 Hecla may sell industrial minerals unit. Sep 30  
 industrial garnet.\* Jun 46  
 iodine property developed. Nov 15  
 iodine.\* Jun 46  
 kaolin.\* Jun 47  
 LaFarge buys stone quarry. Sep 35  
 Lithium, review of 1999 activities.\* Jul 57  
 magnesite.\* Jun 48  
 magnesite.\* Jun 48  
 many industrial minerals users see steady growth in recent years. Jun 4  
 mica mine completes first year. Mar 14  
 mica project to be developed. Jan 14  
 mica.\* Jun 49  
 mining contract awarded. Jan 14

native corporation operates calcium carbonate mine. Jun 14  
 new contracts for phosphate shipments. May 24  
 nitrogen compounds.\* Jun 50  
 Noranda gains control of Falconbridge. Sep 28  
 oil drilling drives barite demand. Mar 12  
 Oklahoma produced \$408 million in industrial minerals. Jun 14  
 online exchange started for industrial minerals. Jun 16  
 overview.\* Jun 21  
 peat.\* Jun 51  
 perlite consumption expected to increase. May 22  
 perlite plant expanded. Jan 14  
 perlite.\* Jun 51  
 phosphate fertilizer production curtailed. Aug 14  
 phosphate.\* Jun 53  
 Pinnacle acquires vanadium leases. Jul 17  
 potash.\* Jun 53  
 production changes at nitrogen facilities. Jul 27  
 pumice and pumicite.\* Jun 54  
 pyrophyllite.\* Jun 64  
 rare earths.\* Jun 55  
 roof monitoring at stone mines.\* Nov 32  
 salt.\* Jun 57  
 silica sand.\* Jun 60  
 soda ash expansion begins. Nov 22  
 soda ash facility opens. Nov 13  
 soda ash.\* Jun 61  
 strontium.\* Jun 62  
 sulfur.\* Jun 63  
 talc.\* Jun 64  
 technology reprocesses borate reserves. Nov 14  
 telescoping conveyor available for aggregates industry. Nov 23  
 titanium.\* Jun 65  
 two-seam mining at trona mine.\* Apr 27  
 vanadium mine opens. Jun 17  
 vermiculite shipments begin. Feb 13  
 vermiculite.\* Jun 66  
 Vulcan acquires aggregates facilities. wollastonite.\* Jun 67  
 zeolites.\* Jun 68  
 zirconium.\* Jun 69

## Interior department

2001 budget focuses on Lands Legacy Initiative. Apr 6  
 bill requires congressional approval for monument designation. Jul 6  
 bill limits Interior's changes to mining law. Sep 8  
 BLM auctions underground coal leases. Jul 28  
 former OSM director named as acting deputy secretary at Interior. May 25  
 Leshy deals mining another setback. Mar 6  
 new national monuments created. Feb 6  
 International Bravo Resources, drilling at Pogo deposit. Sep 42  
 International Vermiculite, vermiculite shipments begin. Feb 13  
**Iodine**  
 industrial minerals review.\* Jun 46  
 iodine property developed. Nov 15  
 Iran, Cominco negotiates for Iranian zinc deposit. Jul 29

## Ireland

Rio Algom explores for Irish zinc. Jun 13  
zinc mine begins shipments. Sep 18

## Iron ore

ARD mitigation at Mt. Whaleback.\*  
Feb 51  
bulk sorting by LIF.\* Sep 73  
CVRD acquires stake in iron ore company. Jul 15  
grinding improvements at Tilden concentrator.\* Feb 41  
Minnesota iron remains competitive.\*  
Jul 62  
modeling software at Empire Mine.  
Sep 47  
North rejects Rio Tinto's takeover bid.  
Aug 7  
production expected to grow. Aug 7  
Rio Tinto wins bidding war for North.  
Sep 16  
Iverson West, Irish zinc mine begins shipments. Sep 18  
Iverson, S., *Mine-shaft conveyance monitoring*.\* Oct 55

## J

Josephine Roche: coal mining executive, labor advocate.\* Houston, T.E.  
Mar 38  
Jackling Lecture, minerals resource development.\* Jul 37  
Jankowski, R.A., *Update on face-ventilation research for improved longwall-dust control*.\* Mar 45  
Jankowski, R.A., *Silica collection concerns when using flooded-bed scrubbers*.\* Apr 49  
John Deere, articulated dump truck introduced. Jan 32

## K

Kaiser, sells engineering unit to repay debt. Jul 19

## Kaolin

development of Georgia kaolin. Oct 21  
Georgia kaolin leads industry growth.  
Oct 4  
industrial minerals review.\* Jun 47  
Karpan, K., former OSM director named as acting deputy secretary at Interior.  
May 25  
Kempton, J.H., *Probabilistic quantification of uncertainty in predicting mine pit-lake water quality*.\* Oct 59  
Kennecott, more gold found at Pipeline.  
Nov 21

## Kentucky

annual review.\* May 72  
coal project will burn municipal waste.  
Feb 10  
mountaintop-removal mining. May 6  
Peabody to develop Kentucky coal mine. Jul 12  
Kentucky-Tennessee Clay, Hecla may sell industrial minerals unit. Sep 30  
Kheir, A.W., *Bit geometry effects on failure characteristics of rock*.\* Jun 101  
Kinross Gold, Dayton Mining moves into Nevada. Jul 18

## Komatsu

excavators designed for confined spaces. Sep 63  
loader designed for quarry use. Jan 29  
mobile crusher available in North America. Mar 39  
Koski, A.E., *Mine planning software models Empire Mine ore*.\* Sep 47  
Kral, S., *Caterpillar's MINExpo exhibit includes a day at Tinaja Hills*.\*

## Dec 35

Kral, S., *SME Annual Meeting: New frontiers in mining — meeting 21st century challenges*.\* Jun 70  
Kral, S., *Clinton's policies are pushing mining off public lands*.\* Jan 33  
Kral, S., *Colorado miners discuss challenges of the new century*.\* Feb 28  
Kral, S., *Peru remains committed to its mining industry*.\* Feb 32  
Kral, S., *New technology discussed at Tailings and Mine Waste '00*.\*  
Jun 97  
Kral, S., *CIM and PDAC — South African gold; mining in a dot.com world*.\*  
Jul 43  
Krebs Engineers, has cyclones available.  
Nov 41  
Kress, D., *Maintaining ring gears in ball mills*.\* Feb 15  
Krupp, conveyors supplied to Colombian plant. Feb 13

## Kvaerner

Apex moves ahead with San Cristobal.  
Oct 14  
to build BHP's copper project. Aug 14

## Kyoto protocol

bill prohibits use of funds for Kyoto protocol. Jul 6  
emissions credits for carbon sinks.  
Sep 8  
EPA prohibited from funding Kyoto measures. Nov 6  
would cause oil prices to increase.  
Apr 6

## Labor

Clinton's bailout plan not enough for UMWA fund. Oct 6  
Falconbridge declares force majeure.  
Nov 18  
Josephine Roche history.\* Mar 38  
MSHA considers taking over coal dust sampling. Aug 5  
Nevada miners to get increased training. Jul 19  
NMA part of coal dust dispute. May 6  
Peabody signs labor deal. Oct 16  
Sullivan Mine to close. Nov 22  
UMWA incumbents announce re-election bids. Jul 23  
underground managers earn more.  
Jul 14  
US miners earn more. Mar 8  
US Steel lays off at Minntac. Dec 15  
Wyoming coal workers reach settlement. Sep 40  
LaFarge, buys stone quarry. Sep 35  
Lakeland Research, research firms to merge. Mar 14  
Laos, copper-gold project sold. Feb 13  
Larson, A.J., *Passive means to detect hot trolley insulators*.\* Jan 43

## Lead

Chinese lead-zinc joint venture formed.  
Jul 23  
Cominco reopens Pend Oreille Mine.  
Oct 14  
Irish zinc mine begins shipments.  
Sep 18  
Pebble Creek receives exploration license in India. Aug 11  
Pend Oreille zinc mine to reopen.  
Aug 14  
Pebble Creek gets prospecting license.  
Sep 37  
US wants to stop Canadian mine development. Jul 26

## Legislation

2000 budget bill includes mill site limits.

## Feb 6

bill prohibits use of funds for Kyoto protocol. Jul 6  
bill reduces capital gains tax on precious metals. Oct 6  
bill requires congressional approval for monument designation. Jul 6  
EPA prohibited from funding Kyoto measures. Nov 6  
measure would create pollution-reduction program. Nov 6  
mining being pushed off public lands.\*  
Jan 33  
proposed constitutional amendment would effectively ban precious metals mining in Colorado. Jul 4  
Lewis, M.W., *Remote-control monitoring cuts maintenance costs*.\* Aug 15  
Liebherr celebrates 50th anniversary, introduces 300-t mining truck.\*  
Yernberg, W.R. Jan 26  
Liebherr, 300-t mining truck introduced.\*  
Jan 26  
Limestone, American Limestone sold.  
Jul 29  
Lithium, review of 1999 activities.\* Jul 57  
Locke, W., *Probabilistic quantification of uncertainty in predicting mine pit-lake water quality*.\* Oct 59  
Long-term subsidence associated with longwall mining — its causes, development and magnitude.\* Luo, Y., Peng, S.S. Oct 49  
**Longwall mining**  
improved longwall-dust control.\*  
Mar 45  
Long-term subsidence associated with longwall mining.\* Oct 49  
Loughran, K., *Eskay Creek Mine and Mill — a continuing success*.\* Jan 19  
**Louisiana**  
phosphate fertilizer production curtailed. Aug 14  
production changes at nitrogen facilities. Jul 27  
Lowell, J.D., *How orebodies are found*.\*  
Jul 31  
Lumsden, S., *Site development over an abandoned coal mine*.\* Oct 31  
Luo, Y., *Long-term subsidence associated with longwall mining — its causes, development and magnitude*.\*  
Oct 49

## M

McCoy, W.G., *Mine-shaft conveyance monitoring*.\* Oct 55  
Mine closures help copper prices improve.\* Yernberg, W.R. Jan 35  
Maintaining ring gears in ball mills.\*  
Kress, D. Feb 15  
Mining technology and research needs — chemical product suppliers' perspective.\* Feb 19  
Mine modeling software for less than \$1,000 — usefulness and limitations.\* Gibbs, B.L. Apr 32  
Minerals resource development, our new challenges.\* Dummett, H.T. Jul 37  
MINExpo International 2000 and World Mining Congress will meet in Las Vegas.\* Aug 25  
Mine planning software models Empire Mine ore.\* Koski, A.E. Sep 47  
Mountaintop-removal controversy slows West Virginia coal mining.\* Peng, S.S. Sep 53  
Mine-shaft conveyance monitoring.\* Beus, M.J., Ruff, T.M., Iverson, S., McCoy,

W.G. Oct 55  
*Mining and sustainable development at Red Dog.* \* Horswill, D.H., Sandvik, H. Nov 25  
*Mining Foundation of the Southwest honors year 2000 inductees.* \* Nov 38  
 Magnesia, industrial minerals review.\* Jun 48  
 Magnesite, industrial minerals review.\* Jun 48  
**Magnesium,**  
 Noranda starts Magnolia production. Dec 13  
 Noranda gains control of Falconbridge. Sep 28  
 Mahoski, B.J., *Systems approach to grinding improvements at the Tilden concentrator.* \* Feb 41  
**Maintenance**  
 Michelin tires reduce mining costs. Aug 23  
 monitoring truck-haulage jolts.\* Aug 20  
 pump testing improves wear life. Mar 36  
 remote-control monitoring cuts maintenance costs.\* Aug 15  
**Mali**  
 AngloGold buys interest in Mali mine. Aug 14  
 gold mine to be developed. Apr 7  
 industry shows interest in Mali gold. Nov 19  
 Manganese, steel production fuels manganese demand. Nov 14  
 Manitoba, zinc plant to be enlarged. Jan 9  
 Marino, G.G., *Site development over an abandoned coal mine.* \* Oct 31  
 Martin, I., *3-D piping design speeds Impala refinery project.* \* Jan 24  
 Marlborough Resources, begins tin development. Dec 16  
 McIvor, R.E., *Systems approach to grinding improvements at the Tilden concentrator.* \* Feb 41  
 McNulty, T.P., *Banning cyanide use at McDonald — an attack on open-pit mining.* \* Dec 19  
**MEG**  
 exploration spending nears bottom of cycle. Dec 14  
 study reassesses exploration vs. acquisition. Nov 16  
 Melchert, G., *Using passive treatment systems for mine closure — a good approach or a risky alternative.* \* Sep 78  
**Mergers**  
 acquisitions increase AngloGold's output. May 14  
 activity tops \$20 billion. Oct 13  
 aggregates consolidation to continue. May 13  
 Alcan launches takeover of Alusuisse. Oct 19  
 Alcan, Algroup closer to merger. Jul 14  
 aluminum merger completed. Jun 11  
 aluminum merger fails. May 15  
 aluminum merger proposed. Apr 10  
 Anglo American buys Shell Coal. Jul 12  
 Billiton leads in contest for Rio Algom. Oct 15  
 Billiton wins Rio Algom. Nov 15  
 Cominco's board rejects Teck's offer. Sep 42  
 CSR America buys aggregates business. Aug 13  
 CSR America buys another aggregates company. Sep 28

CVRD acquires stake in iron ore company. Jul 15  
 Gold Fields, Franco-Nevada agree to merger. Jul 25  
 Gold Fields, Franco-Nevada merger blocked. Nov 15  
 Hanson bids for aggregates company. Jan 14  
 LaFarge buys stone quarry. Sep 35  
 Laotian copper-gold project sold. Feb 13  
 merger activity tops \$17 billion. Sep 25  
 Noranda acquires 6% of Rio Algom. Jun 17  
 Noranda gains control of Falconbridge. Sep 28  
 North rejects Rio Tinto's takeover bid. Aug 7  
 NSA, NAA merge. Sep 35  
 Pangea agrees to Barrick's takeover bid. Aug 9  
 Quebrada Blanca deal his roadblock. Apr 11  
 research firms to merge. Mar 14  
 Rio Algom explores for Irish zinc. Jun 13  
 Rio Tinto wins bidding war for North. Sep 16  
 Rio Tinto wins Ashton Mining. Dec 14  
 study reassesses exploration vs. acquisition. Nov 16  
 Sumitomo increases stake in nickel and copper. May 24  
 Teck to increase interest in Cominco. Aug 14  
 Vulcan acquires aggregates facilities. Oct 15  
 Winspear agrees to De Beers takeover. Oct 15  
 Winspear rejects De Beers' takeover bid. Aug 12  
 Metal Mining Agency of Japan, gold discovery reported in Papua New Guinea. Mar 9  
**Mexico**  
 Hecla moves ahead with Mexican property. Jul 15  
 mining continues to grow. Sep 23  
 zinc mine opens. Nov 20  
**Mica**  
 industrial minerals review.\* Jun 49  
 mine completes first year. Mar 14  
 project to be developed. Jan 14  
 Michelin, tires reduce mining costs. Aug 23  
 Michigan, modeling software at Empire Mine. Sep 47  
 Miller, R.E., *Acceleration and GPS data monitor truck-haulage jolts.* \* Aug 20  
**Mine development**  
 Ahsanti pours gold at Geita. Jul 25  
 Anglo American develops zinc mine. Oct 16  
 Apex moves ahead with San Cristobal. Oct 14  
 Arizona copper mine to be built. Jan 13  
 Aur gets financing for Quebrada Blanca. Aug 9  
 Batu Hijau project is commissioned. Jan 4  
 BHP, Falconbridge in nickel joint venture. Aug 14  
 Black Beauty builds Illinois coal mine. Oct 13  
 Brazilian copper mine planned. Jun 17  
 China and East Asia mining.\* Jun 94  
 cobalt, copper mine planned for Uganda. Nov 22

copper project to be built. Jan 7  
 copper-cobalt mine planned for Zambia. Oct 17  
 Crown Jewel receives unfavorable ruling. Mar 14  
 diamond mine planned. Apr 15  
 diamond mine refused land-use permit. Mar 11  
 garnet plans sidetracked. Aug 13  
 Geita gold mine begins production. Sep 16  
 gold production begun at Red Lake. Sep 44  
 Greek gold mine gets environmental approval. Nov 19  
 Inco to develop nickel deposit. Jul 11  
 Indonesian nickel mine planned. Dec 13  
 industry shows interest in Mali gold. Nov 19  
 iodine property developed. Nov 15  
 Kvaerner to build BHP's copper project. Aug 14  
 lateritic nickel deposit to be developed. Sep 40  
 Mali gold mine to be developed. Apr 7  
 Mexican zinc mine opens. Nov 20  
 mica mine completes first year. Mar 14  
 mica project to be developed. Jan 14  
 minerals resource development.\* Jul 37  
 mining contract awarded. Jan 14  
 Mozambique mineral sands deposit to be developed. Sep 33  
 oil sands project planned. Apr 14  
 Papua New nickel mine planned. Dec 13  
 Peabody to develop Kentucky coal mine. Jul 12  
 platinum mine announced. Mar 14  
 soda ash facility opens. Nov 13  
 software improves spatial modeling. Oct 40  
 Swedish zinc mine developed. Apr 7  
 Swedish nickel mine planned. Dec 13  
 tantalum project to be developed. Oct 19  
 TBMs reach Stillwater's J-M Reef. Aug 8  
 vanadium mine opens. Jun 17  
 Wallaby gold mine to be developed. Dec 12  
 zinc project taking shape. Jan 11  
**Mineral economics and finance**  
 a fish story. Sep 12  
 how things change without any change. Jan 16  
 is the exploration cup half full or half empty? Mar 15  
 power of perseverance. Jun 7  
 review of 2000 Olympics — mining style. Nov 11  
**Mineral processing**  
 bulk sorting by LIF.\* Sep 73  
 cash flow improvements at Carlin No. 4 mill.\* Jan 37  
 columbian plant commissioned. Aug 13  
 copper mine overhauls water system. Mar 36  
 development of large flotation cells.\* Mar 28  
 gold, diamond plants to be modernized. May 20  
 grinding improvements at Tilden concentrator.\* Feb 41  
 Krebs has cyclones available. Nov 41  
 maintaining ring gears in ball mills.\* Feb 15  
 microbiology in metallurgical pro-

cesses.\* Nov 49  
 Pechiney to expand Venezuelan bauxite facility. Sep 16  
 software aids oil-sands plant upgrade. Mar 37  
 Sumitomo considers laterite nickel facility. Jun 15  
 technology reprocesses borate reserves. Nov 14  
 Trail smelter to be reopened. Jun 17  
 Mineral sands, Mozambique mineral sands deposit to be developed. Sep 33

**MINEexpo**  
 eight inducted into hall of fame.\* Aug 43  
 held in Las Vegas.\* Aug 25  
 largest ever held.\* Dec 28  
 Mining, annual review.\* May 33  
 Mining and metals procurement marketplace, online minerals marketplace nears startup. Sep 32  
 Mining Cost Service, mining's economic dilemma. May 14  
 Mining Foundation of the Southwest, honors inductees.\* Nov 38

**Mining Law of 1872**  
 2000 budget bill includes mill site limits. Feb 6  
 bill limits Interior's changes to mining law. Sep 8  
 BLM limited on rulemaking for public lands. Nov 6  
 Leshy deals mining another setback. Mar 6

**Minnesota**  
 Minnesota iron remains competitive.\* Jul 62  
 Northshore wins safety award. Jun 15  
 Mississippi Chemical, production changes at nitrogen facilities. Jul 27  
 Modular Mining Systems, remote-control monitoring cuts maintenance costs.\* Aug 15  
 Molybdenum, Henderson workforce cut by 110. Jan 8

**Montana**  
 annual review.\* May 72  
 Canyon offers property to environmental groups. Jul 18  
 Canyon sues Montana over cyanide ban. May 18  
 cyanide ban at McDonald.\* Dec 19  
 good neighbor agreement becomes legal. Jun 15  
 good neighbor agreement breaks down. May 24  
 Stillwater signs good neighbor agreement. Feb 10  
 TBMs reach Stillwater's J-M Reef. Aug 8  
 vermiculite shipments begin. Feb 13  
 Morrison Knudsen, mining contract awarded. Jan 14  
 Mountaintop-removal mining, controversy slows coal mining.\* Sep 53  
 Mozambique, mineral sands deposit to be developed. Sep 33

**MSHA**  
 better equipment proposed for miners. Feb 8  
 considers taking over coal dust sampling. Aug 5  
 diesel particulates in underground mines.\* Apr 60  
 fatalities trend down for decade. Feb 4  
 health and safety regulations need to be updated. Nov 6  
 mine fatalities drop. Nov 17  
 Nevada miners to get increased train-

ing. Jul 19  
 NMA part of coal dust dispute. May 6  
 NMA, MSHA safety awards announced. Oct 16  
 Northshore wins safety award. Jun 15  
 two miners killed in Utah. Sep 40  
 ventilation plan approved for West Elk Mine. Jul 27  
 Mvelaphanda Platinum, Anglo American sells platinum interest. Nov 21

## N

Nacco, buys US coal properties. Dec 6

**Namibia**  
 Anglo American develops zinc mine. Oct 16  
 diamond production reduced. Sep 21  
 zinc project taking shape. Jan 11

**NANA**  
 Red Dog to increase production. Mar 14  
 sustainable development at Red Dog.\* Nov 25

National Aggregates Association, NSA merger. Sep 35  
 National Coal Council, studies improved coal burning. Dec 6  
 National Mining Hall of Fame, eight inducted into hall of fame.\* Aug 43  
 National Stone Association, NSA merger. Sep 35

**Nevada**  
 annual review.\* May 75  
 cash flow improvements at Carlin No. 4 mill.\* Jan 37  
 copper mine overhauls water system. Mar 36  
 Cortez revises Pipeline estimates. Apr 10  
 Cortez increases Pipeline production. Dec 6  
 Dayton Mining moves into Nevada. Jul 18  
 MINEexpo 2000 held in Las Vegas.\* Aug 25  
 mining adds \$3.31 billion to Nevada's economy. Feb 8  
 more gold found at Pipeline. Nov 21  
 Nevada best place for mining investment. Jan 9  
 Nevada miners to get increased training. Jul 19  
 predict pit lake filling rates.\* Mar 53  
 Rosebud Mine to close. Jul 21  
 sagging gold price lowers Nevada's production. Nov 18  
 state engineer denies Yucca Mountain permit. Mar 6  
 state engineer sued over water permits. May 21  
 Tonkin Springs drilling. Sep 42  
 Yucca Mountain's cross drift tunnel.\* Apr 19

*New technology discussed at Tailings and Mine Waste '00.\* Kral, S. Jun 97*

New Mexico, annual review.\* May 83

**Newfoundland**  
 garnet plans sidetracked. Aug 13  
 Inco acquires more of Voisey's Bay. Oct 16

**Newmont Mining**  
 Batu Hijau project is commissioned. Jan 4  
 cash flow improvements at Carlin No. 4 mill.\* Jan 37  
 community work attacked. Jun 12  
 Idarado property sold as open space. Nov 16

increases cash flow. Sep 17  
 Minahasa stays open. May 15  
 Murdy name CEO. Dec 15  
 profits increase. Mar 7  
 royalty agreement revised. Mar 14  
 settles Yanacocha ownership dispute. Dec 16  
 spill injures eight at Yanacocha. Jul 19  
 Yanacocha gold exports to increase. Aug 11

## Nickel

Anaconda, Gold Fields form exploration alliance. Oct 19  
 automated loading system tested. Sep 4  
 BHP, Falconbridge in nickel joint venture. Aug 14  
 conveyors supplied to Colombian plant. Feb 13  
 Inco acquires more of Voisey's Bay. Oct 16  
 Inco to develop nickel deposit. Jul 11  
 Indonesian mine planned. Dec 13  
 lateritic nickel deposit to be developed. Sep 40  
 Murrin Murrin to expand. Jul 27  
 Murrin Murrin increases production. Dec 15  
 Noranda gains control of Falconbridge. Sep 28  
 Papua New Guinea mine planned. Dec 13  
 production cuts helps nickel price. Feb 7  
 retribution sought from Fluor Daniel. Sep 44  
 Sumitomo considers laterite nickel facility. Jun 15  
 Sumitomo increases stake in nickel and copper. May 24

## NIOSH

detecting hot trolley transfers.\* Jan 43  
 improved longwall-dust control.\* Mar 45  
 injury reports available. Jul 28

## Nitrogen

industrial minerals review.\* Jun 50  
 production changes at nitrogen facilities. Jul 27

## NMA

domestic energy use promoted. Jul 24  
 Gerard named NMA president. Nov 13  
 MINEexpo 2000 to attract 40,000 people. May 23  
 MINEexpo 2000 held in Las Vegas.\* Aug 25  
 MINEexpo 2000 largest ever held.\* Dec 28  
 part of coal dust dispute. May 6  
 safety awards announced. Oct 16  
 Sentinals of Safety awards announced. Jan 12

*Noranda's exploration strategy.\* Stevens, D.L. Apr 55*

## Noranda

acquires 6% of Rio Algom. Jun 17  
 Billiton leads in contest for Rio Algom. Oct 15  
 Billiton wins Rio Algom. Nov 15  
 exploration strategy.\* Apr 55  
 gains control of Falconbridge. Sep 28  
 starts producing magnesium. Dec 13  
 Norddeutsche Affinerie, German plant expansion begins. Nov 22  
 North Atlantic Natural Resources, develops Swedish copper-zinc deposit. Dec 13

## North

rejects Rio Tinto's takeover bid. Aug 7

Rio Tinto wins bidding war for North.  
 Sep 16  
 Northshore Mining, Northshore wins safety  
 award. Jun 15  
 Northwest Territories, diamond mine  
 planned. Apr 15  
**Nuclear waste**  
 state engineer denies Yucca Mountain  
 permit. Mar 6  
 state engineer sued over water permits.  
 May 21  
 Washington Group to operate WIPP.  
 Dec 16  
 Yucca Mountain's cross drift tunnel.\*  
 Apr 19  
 NWMA, mining being pushed off public  
 lands.\* Jan 33

## O

Oates, L.F., *Using option pricing to predict  
 market values of publicly traded  
 mining companies.*\* Feb 25  
 OCl Wyoming, two-seam mining at trona  
 mine.\* Apr 27  
 Ohio, annual review.\* May 86  
**Oil sands**  
 oil sands project planned. Apr 14  
 oil sands liner system.\* Oct 28  
 shovel commissioned at oil sands mine.  
 Apr 42  
 software aids oil-sands plant upgrade.  
 Mar 37  
 O'Kane, M., *Cover system to mitigate ARD  
 in an arid climate — setup of field  
 test plots at BHP Iron Ore's Mt.  
 Whaleback operation.*\* Feb 51  
 Oklahoma, produced \$408 million in indus-  
 trial minerals. Jun 14  
*Online presentation aids classroom teach-  
 ing.*\* Ganguli, R. Nov 42  
**O'Neil, T.**

Australians add local color to medals.  
 Oct 4  
 automated loading system tested.  
 Sep 4  
 Batu Hijau project is commissioned.  
 Jan 4  
 BHP affirms its minerals commitment.  
 Aug 4  
 BLM issues commodity pricing policy.  
 Aug 4  
 Bre-X case. Dec 4  
 Britain adopts metric system. Apr 4  
 Cannington could be largest silver  
 mine. Jan 4  
 Chilean copper production to increase.  
 Nov 4  
 China drops silver-trade restrictions.  
 Mar 4  
 congressmen helpful to mining? Dec 4  
 cyanide: to use or not to use. Dec 4  
 decade of growth for western coal.  
 Oct 4  
 economy strengthens, copper prices  
 up. Feb 4  
 EPRI launches Global Coal Initiative.  
 Nov 4  
 faster microprocessors use copper.  
 Jan 4  
 fatalities trend down for decade. Feb 4  
 four years of copper growth. Sep 4  
 Georgia kaolin leads industry growth.  
 Oct 4  
 global warming gets a dose of science.  
 Mar 4  
 IBM computers speed up with copper.  
 Mar 4  
 many industrial minerals users see  
 steady growth in recent years.

Jun 4  
 mineral databases combined on CDs.  
 Sep 4  
 mining still largest explosives market.  
 Nov 4  
 productivity up, prices down. May 4  
 proposed constitutional amendment  
 would effectively ban precious  
 metals mining in Colorado. Jul 4  
 review shows strong economy that  
 boosts metals and industrial  
 minerals. May 4  
 rock imaging beyond the mine face.  
 Aug 4  
 SME elects officers and directors. Apr 4  
 USGS offers extended metals profiles.  
 Feb 4  
 Wyoming coal sets another record.  
 Apr 4

O'Neil, T., *MINExpo 2000 International  
 largest ever held.*\* Dec 28  
 O'Neil, T., *SME Annual Meeting: New fron-  
 tiers in mining — meeting 21st cen-  
 tury challenges.*\* Jun 70

## Ontario

Falconbridge declares force majeure.\*  
 Nov 18  
 Inco to develop nickel deposit. Jul 11  
*Operational improvements keep Minnesota  
 iron competitive.*\* Yernberg, W.R.  
 Jul 62

## Oregon

Cominco reopens Pend Oreille Mine.  
 Oct 14  
 mining contract awarded. Jan 14  
 Pend Oreille zinc mine to reopen.  
 Aug 14  
 perlite plant expanded. Jan 14  
 Orestest, research firms to merge. Mar 14  
 OSM, surface mine reclamation awards.  
 Jan 12

## Outokumpu

Europe's deepest mine expanded.  
 Jan 10  
 Outokumpu, Gold Fields find gold.  
 Oct 19

## P

*Passive means to detect hot trolley insula-  
 tors.*\* Yenchek, M.R., Larson, A.J.  
 Jan 43  
 Pacific Resources Investments, Laotian  
 copper-gold project sold. Feb 13  
 Pangea Resources, agrees to Barrick's  
 takeover bid. Aug 9

## Papua New Guinea

Freeport agrees on improved relations  
 with tribes. Nov 20  
 gold discovery reported in Papua New  
 Guinea. Mar 9  
 Highlands Pacific gets PNG exploration  
 permit. Sep 29  
 nickel mine to be developed. Dec 13  
 Ok Tedi Mine should close. Apr 10  
 Ok Tedi may remain open. May 20  
 Pasminco Exploration, buys into Peruvian  
 zinc project. Sep 23

## Peabody

coal a misunderstood industry. Jan 7  
 coal mine ships half a billion tons. Mar  
 7  
 seeks to maximize value of Australian  
 assets. Sep 26  
 signs labor deal. Oct 16  
 to develop Kentucky coal mine. Jul 12  
 Peat, industrial minerals review.\* Jun 51  
**Pebble Creek Resources**  
 gets prospecting license. Sep 37  
 receives exploration license in India.

Aug 11

## Pechiney

aluminum merger proposed. Apr 10  
 aluminum merger fails. May 15  
 to expand Venezuelan bauxite facility.  
 Sep 16

Peng, S.S., *Mountaintop-removal contro-  
 versy slows West Virginia coal min-  
 ing.*\* Sep 53

Peng, S.S., *Long-term subsidence associ-  
 ated with longwall mining — its  
 causes, development and magni-  
 tude.*\* Oct 49

*Peru remains committed to its mining in-  
 dustry.*\* Kral, S. Feb 32

## Pennsylvania

annual review.\* May 89  
 coal adds \$12 billion to Pennsylvania's  
 economy. Apr 14  
 coal waste converted to liquid fuel.  
 Jul 13

## Perlite

consumption expected to increase.  
 May 22  
 industrial minerals review.\* Jun 51  
 plant expanded. Jan 14

## Peru

Kvaerner to build BHP's copper project.  
 Aug 14  
 Newmont's community work attacked.  
 Jun 12  
 Pasminco buys into Peruvian zinc  
 project. Sep 23  
 political-risk management in northern  
 Andes.\* Oct 34  
 remains committed to its mining indus-  
 try.\* Feb 32  
 royalty agreement revised. Mar 14  
 spill injures eight at Yanacocha. Jul 19  
 Yanacocha gold exports to increase.  
 Aug 11

## Phelps Dodge

Brazilian copper mine planned. Jun 17  
 Henderson workforce cut by 110. Jan 8  
 Morenci converts copper production to  
 leaching. Jan 36  
 PD, CVRD update copper-gold esti-  
 mates. Apr 15

Philippines, Sumitomo considers laterite  
 nickel facility. Jun 15  
 Phillips Petroleum, increases coalbed  
 methane reserves. Nov 21

## Phosphate

industrial minerals review.\* Jun 53  
 mining contract awarded. Jan 14  
 phosphate fertilizer production cur-  
 tailed. Aug 14  
 Phosphate Chemicals Export Association,  
 new contracts for phosphate ship-  
 ments. May 24  
 Pinnacle Resources, acquires vanadium  
 leases. Jul 17  
 Pittsburg & Midway Coal, Wyoming coal  
 workers reach settlement. Sep 40

## Placer Dome

mining leases granted. Apr 16  
 more gold found at Pipeline. Nov 21  
 Wallaby Mine to be developed. Dec 12

## Platinum group metals

Anglo American sells platinum interest.  
 Nov 21  
 demand outstrips supply. Dec 6  
 good neighbor agreement becomes  
 legal. Jun 15  
 good neighbor agreement breaks  
 down. May 24  
 Highlands Pacific gets PNG exploration  
 permit. Sep 29  
 Outokumpu, Gold Fields find gold.

Oct 19  
palladium price increases. Mar 10  
platinum mine announced. Mar 14  
platinum, palladium post record year.  
Jul 11  
platinum, palladium prices increase in  
2000. Aug 8  
Stillwater signs good neighbor agree-  
ment. Feb 10  
strengthened prices heighten investor  
interest. May 13  
TBM's reach Stillwater's J-M Reef.  
Aug 8  
*Political risk management in the northern  
Andean countries.* \* Spat, W.J.  
Oct 34  
Porterfield, D., *Cover system to mitigate  
ARD in an arid climate — setup of  
field test plots at BHP Iron Ore's Mt.  
Whaleback operation.* \* Feb 51  
Potash, industrial minerals review. \* Jun 53  
**Powder River Basin**  
coalbed methane reserves updated.  
Sep 33  
coal mine ships half a billion tons.  
Mar 7  
Wyoming coal production may de-  
crease. Aug 10  
Precious Metals of Australia, vanadium  
mine opens. Jun 17  
*Probabilistic quantification of uncertainty in  
predicting mine pit-lake water qual-  
ity.* \* Kempton, J.H., Locke, W.,  
Atkins, D., Nicholson, A. Oct 59  
Pruett, R.J., *Georgia kaolin: development  
of a leading industrial mineral.* \*  
Oct 21  
Pumice and pumicite, industrial minerals  
review. \* Jun 54

## R

### RAG Coal

Colorado coal mines produce record  
amounts. Apr 15  
two miners killed in Utah. Sep 40  
Randgold Resources, AngloGold buys  
interest in Mali mine. Aug 14  
Rasmussen, R.S., *Systems approach to  
grinding improvements at the Tilden  
concentrator.* \* Feb 41  
Rare earths, industrial minerals review. \*  
Jun 55  
Raw Materials Group, merger activity tops  
\$17 billion. Sep 25

### Reclamation

AMD treatment technology introduced.  
Sep 19  
bill authorizes Corp of Engineers to  
clean up abandoned mines.  
May 6  
coal ash recycled into cement product.  
Nov 17  
dredges aid in coal mine tailings repro-  
cessing. Apr 41  
Idarado property sold as open space.  
Nov 16  
improvements in AMD technology. \*  
Sep 67  
Peabody wins reclamation, safety  
awards. May 22  
predicting mine pit-lake water quality. \*  
Oct 59  
site development over an abandoned  
coal mine. \* Oct 31  
Redaurum, diamond company files for  
bankruptcy. Mar 14

### Redfern Resources

court revokes Redfern's mine permit.  
Aug 13

US wants to stop Canadian mine devel-  
opment. Jul 26

### Regulations

2000 budget bill includes mill site limits.  
Feb 6  
BLM limited on rulemaking for public  
lands. Nov 6  
EPA bypasses Congress in clean water  
regulations. Aug 5  
health and safety regulations need to  
be updated. Nov 6  
mining being pushed off public lands. \*  
Jan 33  
mountaintop-removal controversy slows  
coal mining. \* Sep 53  
MSHA considers taking over coal dust  
sampling. Aug 5  
*Remote-control monitoring cuts mainte-  
nance costs.* \* Lewis, M.W. Aug 15

### Research and development

ARD mitigation at Mt. Whaleback. \*  
Feb 51  
benefits of clay granules in pesticides. \*  
Nov 54  
bulk sorting by LIF. \* Sep 73  
development of large flotation cells. \*  
Mar 28  
diesel particulates in underground  
mines. \* Apr 60  
grinding improvements at Tilden con-  
centrator. \* Feb 41  
improved longwall-dust control. \*  
Mar 45  
integrated bioreactor system. \* Sep 84  
mine-shaft conveyance monitoring. \*  
Oct 55  
predicting mine pit-lake water quality. \*  
Oct 59  
research firms to merge. Mar 14  
silica concerns when using flooded-bed  
scrubbers. \* Apr 49  
SME research forum. \* Feb 19

Reynolds Metals, aluminum merger com-  
pleted. Jun 11

*Rethinking the use of new technology to  
improve operational performance.* \*  
B. Cavendar. Dec 61

Rhoades, S., *Acceleration and GPS data  
monitor truck-haulage jolts.* \* Aug 20

### Rio Algom

Billiton leads in contest for Rio Algom.  
Oct 15  
Billiton wins Rio Algom. Nov 15  
diamond mine planned. Apr 15  
diamond mine refused land-use permit.  
Mar 11  
explores for Irish zinc. Jun 13  
increases production for most com-  
modities. Mar 13  
Noranda acquires 6% of Rio Algom.  
Jun 17  
North rejects Rio Tinto's takeover bid.  
Aug 7  
wins bidding war for North. Sep 16

### Romania

design flaws contribute to tailings dam  
failure. Jun 12  
tailings spill damaged assessed. Apr 9  
*Roof monitoring helps prevent injuries at  
stone mines.* \* I. Iannacchione, A.T.,  
Prosser, L.J., Grau, R., Oyler, D.C.,  
Dolinar, D.R., Marshall, T.E.,  
Compton, C.S. Nov 32  
Roof support, roof monitoring at stone  
mines. \* Nov 32  
Royal Gold, more gold found at Pipeline.  
Nov 21

### Royalties

Colorado mining valued at \$2.84 billion.

Aug 10  
royalty agreement revised. Mar 14  
Ruff, T.M., *Mine-shaft conveyance monitor-  
ing.* \* Oct 55

## S

Salaries, underground managers earn  
more. Jul 14

### Salt

belt weigher aids Chilean salt mining.  
Sep 65  
industrial minerals review. \* Jun 57

### Sand and gravel

aggregates consolidation to continue.  
May 13  
Hanson bids for aggregates company.  
Jan 14  
industrial minerals review. \* Jun 36  
mobile screen offered for quarried ma-  
terial. Jul 61  
US construction expected to decline.  
Feb 11

Sandvik, H., *Mining and sustainable devel-  
opment at Red Dog.* \* Nov 25

Saseen, G.P., *Estimation of diesel particu-  
late concentrations in underground  
mines.* \* Apr 60

Screening, mobile screen offered for quar-  
ried material. Jul 61

SeaCal, native corporation operates cal-  
cium carbonate mine. Jun 14

SGI International, coal supply contract  
signed. Feb 12

Shevenell, L., *Analytical method for pre-  
dicting filling rates of mining pit  
lakes: example from the Getchell  
Mine, Nevada.* \* Mar 53

*Silica collection concerns when using  
flooded-bed scrubbers.* \* Colinet,  
J.F., Jankowski, R.A. Apr 49

Silica sand, industrial minerals review. \*  
Jun 60

### Silver

Apex moves ahead with San Cristobal.  
Oct 14  
bill reduces capital gains tax on pre-  
cious metals. Oct 6  
Cannington could be largest silver  
mine. Jan 4  
China drops silver-trade restrictions.  
Mar 4  
Hecla moves ahead with Mexican prop-  
erty. Jul 15  
Pebble Creek gets prospecting license.  
Sep 37  
Pebble Creek receives exploration  
license in India. Aug 11  
Sunshine files for bankruptcy. Oct 17  
supply cannot keep up with demand.  
Jul 22

US wants to stop Canadian mine devel-  
opment. Jul 26

Silver Institute, silver supply cannot keep  
up with demand. Jul 22

Simpson, A.K., *Using option pricing to  
predict market values of publicly  
traded mining companies.* \* Feb 25

*Site development over an abandoned coal  
mine.* \* Marino, G.G., Lumsden, S.  
Oct 31

*SME Annual Meeting: New frontiers in  
mining — meeting 21st century  
challenges.* \* O'Neil, T., Kral, S.,  
Yernberg, W.R. Jun 70

### SME

closures help copper prices improve. \*  
Jan 35  
elects officers and directors. Apr 4  
Gary Howell passes away. Jun 11

- how orebodies are found.\* Jul 31  
improvements in AMD technology.\*  
Sep 67  
meeting 21st century challenges.\*  
Jun 70  
microbiology in metallurgical processes.\* Nov 49  
minerals resource development.\*  
Jul 37  
Minnesota iron remains competitive.\*  
Jul 62  
president's interview.\* Mar 17  
research forum.\* Feb 19
- SNC-Lavalin**  
fertilizer complex to be expanded.  
Feb 13  
gold, diamond plants to be modernized.  
May 20
- Soda ash**  
expansion begins. Nov 22  
facility opens. Nov 13
- Software**  
improves spatial modeling. Oct 40  
mine modeling software for less than  
\$1,000.\* Apr 32  
modeling software at Empire Mine.  
Sep 47
- Solitario Resources**  
Pasminco buys into Peruvian zinc  
project. Sep 23  
royalty agreement revised. Mar 14  
Solomon Islands, unrest threatens gold  
mine. Jul 22  
Solvay Minerals, soda ash expansion be-  
gins. Nov 22  
Somasundaran, P., *Effect of additives on  
drilling hard rock.*\* Jan 48
- South Africa**  
Anglo American sells platinum interest.  
Nov 21  
China major coal player. Apr 8  
coal company formed for black invest-  
ment. Dec 11  
diamond recovery plant planned.  
Apr 15  
Gold Fields, Franco-Nevada merger  
blocked. Nov 15  
mining in a dot.com world.\* Jul 43  
Pinnacle acquires vanadium leases.  
Jul 17  
platinum mine announced. Mar 14  
plough feeder reclaims bulk material.  
Oct 39  
Winspear rejects De Beers' takeover  
bid. Aug 12  
South Atlantic Resources, large diamond  
found. Jan 13
- South Dakota**  
annual review.\* May 90  
Homestake Mine to close. Oct 17  
Southern Mining, Mozambique mineral  
sands deposit to be developed.  
Sep 33  
Spat, W.J., *Political risk management in  
the northern Andean countries.*\*  
Oct 34  
Spatz, D.M., *Team organization in the  
mining industry.*\* Jul 50  
Stevens, D.L., *Noranda's exploration strat-  
egy.*\* Apr 55  
Steel, US Steel lays off at Minntac. Dec 15
- Stillwater Mining**  
good neighbor agreement breaks  
down. May 24  
good neighbor agreement becomes  
legal. Jun 15  
signs good neighbor agreement.  
Feb 10  
TBMs reach Stillwater's J-M Reef.
- Aug 8  
Strontium, industrial minerals review.\*  
Jun 62  
Subsidence, long-term subsidence associ-  
ated with longwall mining.\* Oct 49  
Sudbury Contact Mines, Tonkin Springs  
drilling. Sep 42
- Sumitomo**  
can sue banks in copper scandal.  
Dec 16  
considers laterite nickel facility. Jun 15  
increases stake in nickel and copper.  
May 24  
Sunshine Mining, files for bankruptcy.  
Oct 17
- Sweden**  
copper-zinc mine to be developed.  
Dec 13  
zinc mine developed. Apr 7  
Syncrude Canada, oil sands liner system.\*  
Oct 28  
*Systems approach to grinding improve-  
ments at the Tilden concentrator.*\*  
McIvor, R.E., Weldum, T.P.,  
Mahoski, B.J., Rasmussen, R.S.  
Feb 41
- T**  
*Tailings dam failures — Why do they con-  
tinue to occur?\** D.R. East. Dec 57  
Talc and pyrophyllite, industrial minerals  
review.\* Jun 64  
Tantalum project to be developed. Oct 19
- Tanzania**  
Ahsanti pours gold at Geita. Jul 25  
Geita gold mine begins production.  
Sep 16  
gold reserves increased at Tanzanian  
project. Nov 13
- Taxes**  
bill reduces capital gains tax on pre-  
cious metals. Oct 6  
Colorado mining valued at \$2.84 billion.  
Aug 10  
reform plan targets mining. Feb 6  
Wyoming coal producers face new tax.  
Apr 16  
Taylor, D.R., *Environmental benefits of us-  
ing clay granules in pesticide appli-  
cations.*\* Nov 54  
*Team organization in the mining industry.*\*  
Spatz, D.M. Jul 50
- Technology news**  
aquatic mapping services available.  
Jan 30  
aluminum dome stores limestone.  
Jan 32  
AMD treatment technology introduced.  
Sep 19  
articulated dump truck introduced.  
Jan 32  
Atlas Copco introduces exploration  
drilling rig. Sep 64  
belt precleaner cuts production costs.  
Sep 65  
belt weigher aids Chilean salt mining.  
Sep 65  
breathing unit supplies four hours of air.  
Oct 40  
clamps help reduce conveyor mainte-  
nance. Mar 34  
coal ash recycled into cement product.  
Nov 17  
conveyor is Europe's longest. Sep 64  
copper mine overhauls water system.  
Mar 36  
Degussa's CyPlus packaging reduces  
waste. Sep 66  
dozers add performance features.
- Apr 40  
dredges aid in coal mine tailings repro-  
cessing. Apr 41  
drilling, grouting for TBMs. Apr 39  
excavators designed for confined  
spaces. Sep 63  
foamed grout controls underground  
fire.\* Sep 58  
GE supplies electrical systems for  
draglines. Aug 23  
Komatsu loader designed for quarry  
use. Jan 29  
Krebs has cyclones available. Nov 41  
Michelin tires reduce mining costs.  
Aug 23  
MINExpo 2000 held in Las Vegas.\*  
Aug 25  
mobile crusher available in North  
America. Mar 39  
mobile screen offered for quarried  
material. Jul 61  
new LHD available. Oct 38  
online presentation aids teaching.\*  
Nov 42  
plane applies dust suppressant.  
Oct 42  
plough feeder reclaims bulk material.  
Oct 39  
pump testing improves wear life.  
Mar 36  
rock bolt tester improves mine safety.  
Jul 63  
roofbolt offers long-term support.  
Aug 42  
secondary cleaner adds to belt effi-  
ciency. Jan 31  
shovel commissioned at oil sands mine.  
Apr 42  
software aids oil-sands plant upgrade.  
Mar 37  
software improves spatial modeling.  
Oct 40  
stationary conveyors offered for mines.  
Nov 23  
telescoping conveyor available for  
aggregates industry. Nov 23  
underground warning system signals  
emergencies. Mar 35
- Teck**  
Cominco's board rejects Teck's offer.  
Sep 42  
Quebrada Blanca deal hits roadblock.  
Apr 11  
to increase interest in Cominco.  
Aug 14  
Teco Coal, acquires Kentucky coal mines.  
Dec 16  
Texas, annual review.\* May 93  
Thompson, L., *Integrated bioreactor sys-  
tem for the treatment of cyanide,  
metals and nitrates in mine process  
water.*\* Sep 84  
Titanium, industrial minerals review.\*  
Jun 65  
Trona, two-seam mining at trona mine.\*  
Apr 27
- Tunneling**  
drilling, grouting for TBMs. Apr 39  
TBMs reach Stillwater's J-M Reef.  
Aug 8  
*Two-seam mining stability at OCI's Big  
Island trona mine.*\* Agapito, J.F.T.,  
Goodrich, R.R., Andrews, M.L.  
Apr 27  
TVX Gold, Greek gold mine gets environ-  
mental approval. Nov 19
- U**  
Uganda, cobalt, copper mine planned for  
Uganda. Nov 22

Ukraine, 81 killed in explosion. Apr 16  
UM Engineering, zinc studies proceed.  
Feb 9

#### UMWA

Clinton's bailout plan not enough for  
UMWA fund. Oct 6  
incumbents announce re-election bids.  
Jul 23  
NMA part of coal dust dispute. May 6  
Peabody signs labor deal. Oct 16  
Wyoming coal workers reach settle-  
ment. Sep 40

#### Underground mining

118 killed in Chinese explosion.  
Nov 21  
81 killed in explosion. Apr 16  
automated loading system tested.  
Sep 4  
breathing unit supplies four hours of air.  
Oct 40  
can automated guidance systems help  
underground mining? Dec 68  
coal production records set. Jul 28  
conveyor is Europe's longest. Sep 64  
diesel particulates in underground  
mines.\* Apr 60  
drilling, grouting for TBMs. Apr 39  
effect of additives on drilling in hard  
rock.\* Jan 48  
Eskay Creek Mine and Mill.\* Jan 19  
Europe's deepest mine expanded.  
Jan 10  
foamed grout controls underground  
fire.\* Sep 58  
ground control and worker safety in  
coal mines.\* Jun 110  
improved longwall-dust control.\*  
Mar 45  
Kid Creek Mine deepest base metals  
mine. Sep 29  
Long-term subsidence associated with  
longwall mining.\* Oct 49  
mine-shaft conveyance monitoring.\*  
Oct 55  
new LHD available. Oct 38  
roof monitoring at stone mines.\*  
Nov 32  
roofbolt offers long-term support.  
Aug 42  
soda ash facility opens. Nov 13  
two miners killed in Utah. Sep 40  
two-seam mining at trona mine.\*  
Apr 27  
underground managers earn more.  
Jul 14  
underground warning system signals  
emergencies. Mar 35  
ventilation plan approved for West Elk  
Mine. Jul 27  
West Elk Mine returns to production.  
Sep 40

*Update on face-ventilation research for  
improved longwall-dust control.\**  
Jankowski, R.A., Colinet, J.F.  
Mar 45

US Borax, technology reprocesses borate  
reserves. Nov 14

US Gold, Tonkin Springs drilling. Sep 42

#### US government

2000 budget bill includes mill site limits.  
Feb 6  
2001 budget focuses on Lands Legacy  
Initiative. Apr 6  
better equipment proposed for miners.  
Feb 8  
bill authorizes Corp of Engineers to  
clean up abandoned mines.  
May 6  
bill limits Interior's changes to mining

law. Sep 8

bill requires congressional approval for  
monument designation. Jul 6

BLM auctions underground coal leases.  
Jul 28

BLM issues commodity pricing policy.  
Aug 4

BLM limited on rulemaking for public  
lands. Nov 6

clean air case goes to Supreme Court.  
Dec 6

coal project will burn municipal waste.  
Feb 10

court rules against industry in emis-  
sions case. Apr 6

diesel particulates in underground  
mines.\* Apr 60

DOE seeks NCC assistance. Dec 6  
energy demand continues to grow.  
May 14

EPA bypasses Congress in clean water  
regulations. Aug 5

EPA prohibited from funding Kyoto  
measures. Nov 6

fatalities trend down for decade. Feb 4  
Forest Service emphasizes conserva-  
tion. Mar 6

Forest Service road building ban. Dec 6  
former OSM director named as acting  
deputy secretary at Interior.  
May 25

health and safety regulations need to  
be updated. Nov 6

injury reports available. Jul 28

mine fatalities drop. Nov 17  
mine seismicity and nuclear test ban  
treaty.\* Mar 22

mineral commodity summaries avail-  
able. May 25

mountaintop-removal controversy slows  
coal mining.\* Sep 53

mountaintop-removal mining. May 6  
MSHA considers taking over coal dust

sampling. Aug 5  
new national monuments created.  
Feb 6

NMA part of coal dust dispute. May 6  
NMA, MSHA safety awards announced.  
Oct 16

NCC to study improved coal burning.  
Dec 6

Northshore wins safety award. Jun 15  
Rock imaging beyond the mine face.  
Aug 4

states to share \$575 million in federal  
mining revenues. Dec 16

state engineer denies Yucca Mountain  
permit. Mar 6

surface mine reclamation awards.  
Jan 12

tax reform plan targets mining. Feb 6  
TRI lists mining as leading polluter.  
Jun 6

two miners killed in Utah. Sep 40  
US wants to stop Canadian mine devel-  
opment. Jul 26

USGS offers extended metals profiles.  
Feb 4

ventilation plan approved for West Elk  
Mine. Jul 27

wetlands regulations would hurt mining.  
Sep 8

Yucca Mountain's cross drift tunnel.\*  
Apr 19

*Using diagnostic process analysis to im-  
prove cash flow at Newmont's  
Carling Mill No. 4.\** Brittan, M.,  
Arthur, B. Jan 37

*Using option pricing to predict market*

*values of publicly traded mining  
companies.\** Simpson, A.K., Oates,  
L.F. Feb 25

*Using passive treatment systems for mine  
closure — a good approach or a  
risky alternative.\** Eger, P.,  
Melchert, G., Wagner, J. Sep 78

USFS, Forest Service emphasizes conser-  
vation. Mar 6

#### USGS

mineral commodity summaries avail-  
able. May 25

offers extended metals profiles Feb 4

#### Utah

annual review.\* May 93

Phillips increases coalbed methane  
reserves. Nov 21

two miners killed in Utah. Sep 40

#### V

#### Vanadium

Pinnacle acquires vanadium leases.  
Jul 17

vanadium mine opens. Jun 17

Van Ginkel, G., *3-D piping design speeds  
Impala refinery project.\** Jan 24

#### Venezuela

Pechiney to expand Venezuelan baux-  
ite facility. Sep 16

political-risk management in northern  
Andes.\* Oct 34

#### Ventilation

diesel particulates in underground  
mines.\* Apr 60

improved longwall-dust control.\*  
Mar 45

ventilation plan approved for West Elk  
Mine. Jul 27

#### Vermiculite

industrial minerals review.\* Jun 66  
vermiculite shipments begin. Feb 13

Virginia, annual review.\* May 100  
Voisey's Bay, Inco acquires more of

Voisey's Bay. Oct 16

Vulcan Materials, acquires aggregates  
facilities. Oct 15

Wadsworth award, microbiology in metal-  
lurgical processes.\* Nov 49

Wagner, J., *Using passive treatment sys-  
tems for mine closure — a good  
approach or a risky alternative.\**  
Sep 78

Walden, J., *Acceleration and GPS data  
monitor truck-haulage jolts.\** Aug 20

#### Washington

annual review.\* May 101

Crown Jewel receives unfavorable  
ruling. Mar 14

#### Washington survey

2000 budget bill includes mill site limits.  
Feb 6

2001 budget focuses on Lands Legacy  
Initiative. Apr 6

bill authorizes Corp of Engineers to  
clean up abandoned mines.  
May 6

bill limits Interior's changes to mining  
law. Sep 8

bill prohibits use of funds for Kyoto  
protocol. Jul 6

bill reduces capital gains tax on pre-  
cious metals. Oct 6

bill requires congressional approval for  
monument designation. Jul 6

BLM limited on rulemaking for public  
lands. Nov 6

Clinton proposes environmental as-  
sessments. Aug 5

Clinton's bailout plan not enough for

UMWA fund. Oct 6  
cyanide initiative wording changed. Jun 6  
election important to mining industry. Jun 6  
emissions credits for carbon sinks. Sep 8  
EPA bypasses Congress in clean water regulations. Aug 5  
EPA prohibited from funding Kyoto measures. Nov 6  
Forest Service emphasizes conservation. Mar 6  
group promotes increased coal use. Oct 6  
health and safety regulations need to be updated. Nov 6  
Kyoto protocol would cause oil prices to increase. Apr 6  
Leshy deals mining another setback. Mar 6  
measure would create pollution-reduction program. Nov 6  
MSHA considers taking over coal dust sampling. Aug 5  
new national monuments created. Feb 6  
NMA part of coal dust dispute. May 6  
state engineer denies Yucca Mountain permit. Mar 6  
Supreme Court decides clean air act must consider costs. Jul 6  
tax reform plan targets mining. Feb 6  
TRI lists mining as leading polluter. Jun 6  
wetlands regulations would hurt mining. Sep 8  
Washington Group International, gets contract for WIPP. Dec 16  
Weldum, T.P., *Systems approach to grinding improvements at the Tilden concentrator.* Feb 41

**West Virginia**  
annual review.\* May 102  
mountaintop-removal mining. May 6  
mountaintop-removal controversy slows coal mining.\* Sep 53

**Winspear Diamonds**  
agrees to De Beers' takeover. Oct 15  
rejects De Beers' takeover bid. Aug 12  
Wirtgen, belt weigher aids Chilean salt mining. Sep 65

Wisconsin, annual review.\* May 104

**WMC**  
automated loading system tested. Sep 4  
Mozambique mineral sands deposit to be developed. Sep 33  
Wollastonite, industrial minerals review.\* Jun 67  
World of risk, sub-Saharan Africa remains risky. Oct 11

**Wyoming**  
annual review.\* May 104  
coal supply contract signed. Feb 12  
coal mine ships half a billion tons. Mar 7  
coal sets another record. Apr 4  
coal producers face new tax. Apr 16  
coal workers reach settlement. Sep 40  
coal production may decrease. Aug 10  
Powder River coalbed methane reserves updated. Sep 33  
soda ash expansion begins. Nov 22  
two-seam mining at trona mine.\* Apr 27

**Y**

Yenchek, M.R., *Passive means to detect hot trolley insulators.* Jan 43  
Yernberg, W.R., *SME Annual Meeting: New frontiers in mining — meeting 21st century challenges.* Jun 70  
Yernberg, W.R., *Liebherr celebrates 50th anniversary, introduces 300-t mining truck.* Jan 26  
Yernberg, W.R., *Mine closures help copper prices improve.* Jan 35  
Yernberg, W.R., *China and East Asia — potential resources, specific projects.* Jun 94  
Yernberg, W.R., *Coal industry leaders meet to discuss methane issues.* Jul 59  
Yernberg, W.R., *Operational improvements keep Minnesota iron competitive.* Jul 62  
Yernberg, W.R., *Improvements seen in acid-mine-drainage technology.* Sep 67

**Yucca Mountain**  
cross drift tunnel.\* Apr 19  
state engineer denies Yucca Mountain permit. Mar 6

state engineer sued over water permits. May 21

## Z

**Zambia**  
copper-cobalt mine planned for Zambia. Oct 17  
Zambia completes privatization. May 17  
Zeolites, industrial minerals review.\* Jun 68

**Zinc**  
Anglo American develops zinc mine. Oct 16  
Apex moves ahead with San Cristobal. Oct 14  
Chinese lead-zinc joint venture formed. Jul 23  
Cominco negotiates for Iranian zinc deposit. Jul 29  
Cominco reopens Pend Oreille Mine. Oct 14  
India increases zinc, aluminum production. Jul 16  
Irish zinc mine begins shipments. Sep 18  
Mexican zinc mine opens. Nov 20  
Pasminco buys into Peruvian zinc project. Sep 23  
Pebble Creek gets prospecting license. Sep 37  
Pebble Creek receives exploration license in India. Aug 11  
Pend Oreille zinc mine to reopen. Aug 14  
plant to be enlarged. Jan 9  
project taking shape. Jan 11  
Quebrada Blanca deal hits roadblock. Apr 11  
Red Dog to increase production. Mar 14  
Rio Algom explores for Irish zinc. Jun 13  
studies proceed. Feb 9  
Sullivan Mine to close. Nov 22  
sustainable development at Red Dog.\* Nov 25  
Swedish zinc mine developed. Apr 7  
Trail smelter to be reopened. Jun 17  
US wants to stop Canadian mine development. Jul 26  
Zirconium, industrial minerals review.\* Jun 69

## Part 2: SME News

### A

#### Accreditation Board for Engineering and Technology (ABET)

SME's influence on the quality of US engineering programs, Apr 73

Advanced Placement geology courses need industry support, Sep 99

#### AIME

Awards, Feb 73

Smith scholarship given to Applegate, Dec 81

Alsobrook, A. Frank, Jul 84

Altmeyer, Thomas J., Aug 69

American Geological Institute

Develops geoscience online calendar, Sep 90

Offers Congressional Fellowships, Jan 55

Amerikohl Mining, Nov 7

Arnold, Barbara J., Jul 81

Arnold, James, Sep 94

Arnold, Timothy D., Jul 85

Arrowsmith, Donald W., Jul 81

Avery, Dale, Apr 67

#### Awards

AIME Honorary Membership, Feb 75  
Coal Division Distinguished Service, Feb 66

Dickerson, Ben F., Feb 63

Dreyer, Robert M., Feb 63

Eavenson, Howard N., Feb 63

Environmental Conservation Distinguished Service, Feb 74

Gaudin, Antoine M., Feb 64

GEM - Individual, Feb 70

GEM - Local Section, Feb 70

Harding, Hal Williams, Feb 73

IndM Division Young Scientist, Feb 69

Industrial Minerals Division Distinguished Service, Feb 67

Jackling, Daniel C., Feb 64

M&E Division Distinguished Service, Feb 67

M&E Division Outstanding Young Professional, Feb 68

McConnell, Robert Earle, Feb 74

MPD Outstanding Young Engineer, Feb 68

Nicholls, Percy, Feb 73

Peele, Robert, Feb 65

President's Citation, Feb 69

Rahn, Ivan B., Feb 70

Ramsay, Erskine Medal, Feb 74

Richards, Robert H., Feb 75

Saunders, William Lawrence Gold Medal, Feb 75

Stefanko Best Paper, Feb 68

Taggart, Arthur F., Feb 65

Wadsworth, Milton E., Feb 65

Woomer, J.W., Feb 66

### B

Bancroft Library publishes Lowell and Clarkson oral histories, Mar 67

Barker, James M., Jul 76

Barsotti, Aldo, Jul 83

Barton, Glen, Mar 61

Bates, William, Aug 76

Bayer, Douglas, Apr 69, Jul 76

Benavides, Alberto, Mar 67

Bennett, Earl, Sep 95

Big Brown Mine, Nov 70

Big Sky Coal, Nov 70

Bise, Christopher, May 115

Black Hills Mining Museum elects officers Jan 54,

Blazina, Ashloy, Aug 67

Bleifuss, Rodney L., Feb 71

Botts, Steven D., Jul 78

Boyd, James W., Feb 71

Brierley, James A., Feb 65

Brown, Steven, Apr 68

Bryan, Dennis P., Jul 79

Bullock, Richard L., Dec 81

Burst, John F., Feb 73

### C

#### Call for Papers

20th International Conference on Ground Control in Mining, Oct 69

Carr, Lin, Jan 54

Caterpillar and Matchbox make computer game for kids, May 117

Caterpillar receives Prazen Award from NMA, Mar 61

Cavender, Bruce, Jan 53, Feb 63

Chander, Subhash, Jul 86

Clark, Tiffany, Aug 67

Clarkson, Robert, Mar 67

Clem, William, Apr 75, Mar 65

Clements, Edward J., Aug 67

#### Coal Division

Coal Division Views

2000-01 scholarships announced, Aug 70,

Minutes of the Executive Committee and business meeting, Jun 124

Colmenares, Martin, Apr 75

Colorado Mining Exhibit Foundation

Sponsors booth at Taste of Colorado, Jun 123

Sponsors Taste of Colorado exhibit, Oct 70

#### Coming Events

Jan 63, Feb 36, Mar 42, Apr 44, May 30, Jun 130, Jul 89, Aug 79, Sep 101, Oct 43, Nov 46, Dec 54

Commonwealth Edison gives \$25 million to Illinois coal industry, Jun 123

Congressional visits day needs participants, Mar 64

### D

Daemen, Jaak, May 117

Dagdelen, Kadri, Jul 80

DeCock, Austin, Aug 67

Dombrowski, Thomas, Jul 84

Doney, Edward D., Jul 78

Dowling, Edward C. Jr., Jul 81

Driscoll, Joseph M., Jul 80

Drummond Mining, Nov 70

Dummett, Hugo T., Feb 64

Dunn, Margaret H., Feb 74

### E

Earth Day notes industry contributions, May 123

El Pomar Foundation honors NMA Hall of Fame, Jan 54

#### Employment Service

Jan 67, Feb 77, Mar 70, Apr 78, May 125, Jun 133, Jul 91, Aug 81, Sep 103, Oct 75, Nov 74, Dec 86

English, Lloyd, Aug 70

#### Environmental Division

Environmental Division News

Completing our third year-Looking to the new millennium, Jan 57

Minutes of the Executive Committee meeting, Jun 122

Eyde, Daniel T., Jul 77

Fields, Russ, Jan 53

Filas, Barbara, Jan 53

Filyk, Anthony, Jul 75

Frantz, Robert L., Feb 74

Freas, Robert C., Aug 69

#### Free Literature

Jan 66, Mar 69, Apr 82, May 28, Jun 132, Jul 94, Aug 81, Sep 103, Oct 75, Oct 77, Nov 74, Dec 85

Fuerstenau, Maurice, Mar 67

### G

Ganguli, Rajive, Apr 69

#### GEM Facts

1999 GEM awards presented at SME meeting in Salt Lake City, Apr 67

Denver-area Boy Scouts hold mining camporee, Dec 79

Earth Day celebrations and minerals education, Jan 58

Geoscientists plan for third annual Earth Science Week, Sep 93

Local sections celebrate Earth Day, Jun 119

MEC educates science teachers at NSTA conventions, Feb 59

MEC plans fall NSTA exhibit, Sep 95

Minerals education events a success for Pittsburgh Section, Jun 118

Ninth Annual Minerals Education Conference will be held in Spokane, May 114

Rockin' again in Wisconsin, Dec 79

San Francisco section hosts booth at science fair, Oct 69

Science and engineering fair winners honored by SME, Aug 67

SME members reach out to the public with minerals information, Mar 63

Virginia Tech mining students run GEM program, Nov 65

Gentry, Donald W., Feb 75

Gertsch, Richard, Jul 79, Feb 67

Global mining recruitment alliance formed, Jan 55

Green, Mike, Oct 73

### H

Hancock, Bill A., Feb 71, Jul 80

Hardie, Colin, Apr 68

Harwood, Cary P. Jr., Feb 66

Hendrickson, Robin, Mar 65

Herpfer, Marc A., Jul 84

Hickman, Robert, Feb 75

Higgins, Terra, Aug 67

Hilderbrand, Thomas, Jul 77

### I

#### Industrial Minerals Division (IndM)

In the Aggregate

Searching the crystal ball for the future of industrial minerals, Apr 71

Executive Committee and annual business meeting minutes, Jun 121

Iron and Steel Society (ISS)  
Recap of 2000 spring meeting, Jun 128  
Appoints new board members, May 117

## J

Jackling, Daniel C., Feb 64  
James, Amy, Jul 75

## K

Karmis, Michael, Oct 67  
Karpan, Katherine, May 115  
Kawatra, S. Komar, Feb 75, Aug 70, Sep 94  
Kendorski, Francis S., Jul 80  
Khair, A. Wahab, May 115, Aug 70  
Knudsen, H. Peter, Aug 70  
Kogel, Jessica Elzea, Jul 79  
Kral, Vic, Mar 65  
Kruse, Gary, Dec 78  
Kvitkovich, James F., Jul 76

## L

Laskowski, Janusz S., Feb 65  
Leigh, R. Terry, Feb 70, Jul 77  
Leon, Michael H., Jul 83  
Lewis, Mark, Mar 65

## Literature Review

Feb 5, Jun 9, Oct 18

Littleton, Kathy, Jul 83

## Local Sections

Coeur d'Alene wins GEM Award, Feb 70  
Colorado hosts booth at Denver Zoo on Earth Day, Jun 119  
Colorado MPD Subsection holds 50th annual meeting in Colorado Springs, Feb 62; Presents Daman Lifetime Achievement Award, Mar 64  
Colorado Plateau and CSM alums join in highway cleanup, Oct 70  
Columbia wins GEM award, Feb 70  
Florida and St. Louis win SME membership contest, Jun 119  
Minnesota plans 73rd annual meeting, Mar 65  
Northern Nevada endows Hugh C. Ingle Jr. scholarship, Mar 65; Establishes scholarships, May 118; Offers mining calendar, Nov 69  
Pittsburgh and GAI host asset-management meeting, Oct 70  
Pittsburgh plans meetings for 2000, Mar 65  
Pittsburgh sponsors regional science and engineering fair, Jun 118  
San Francisco celebrates Earth Day at the NASA-Ames Research Center, Jun 119; Hosts booth at science fair, Oct 69  
Sierra Nevada visits bucket-line dredge, Jul 73  
Southern California announces fall meetings, Aug 71  
Washington DC gives Hoover award to Alma Hale Paty, Jul 73  
Washington DC holds Student's Day 2000, May 115  
Wyoming awards three scholarships, May 115; gives Gardner scholarship to Carlisle, Dec 74

Lombardo, Walt, Jan 53  
Long, Jane C.S., Mar 65  
Lootens, Douglas J., Jul 82  
Lowell, J. David, Feb 63, Feb 74, Mar 67, Sep 90

Luckie, Peter T., Feb 73  
Luttrell, Gerald H., Aug 72  
Luxbacher, George W., Jul 78  
Lynch, Alban J., Feb 64

## M

Mackay School of Mines  
Establishes Mining Life Cycle Center, Apr 72  
Submits winner in Carlson Software contest, May 117  
Manos, Emanuel Z., Apr 69  
Mansanti, John G., Jul 86  
Marsden, John O., Jul 86  
Martin Lake Mine, Nov 70  
Mason, Bruce, Feb 72  
McCarl, Henry N., Feb 72  
McCarter, M.K., Aug 71  
McCaw School of Mines adds exhibits, Jan 54  
McGill University hosts mineral processing seminar, Apr 66  
Meade, John, Jan 54, Oct 73

## Meetings

Clay Minerals Society plans June 2001 meeting, Dec 80  
International Society of Explosives Engineers 27th annual meeting, Oct 69  
Kazakhstan Mining and Metallurgy Industry infrastructure exhibition, Aug 75  
Managing your Mineral and Real Estate Assets, Oct 70  
Mechanized Excavation - The Next Decade, Jul 87  
Minnesota section plans 73rd annual meeting, Mar 65  
NIOSH hosts roof-support workshop, Jun 125  
Penn State 2000 Mineral Symposium, Mar 64  
Sixth International Symposium on In Situ and On-Site Bioremediation, Sep 90  
SME's Arizona Conference to be held in Tucson, Nov 71  
Summit 2000, Geological Society of America, Sep 95  
Winds of Change is theme of Northwest Mining Association meeting, Nov 68

## Membership

Jan 67, Feb 77, Mar 70, Apr 78, May 125, Jun 133, Jul 91, Aug 81, Sep 103, Oct 75, Nov 74, Dec 86

Miller, Marshall S., Feb 73

## Mineral and Metallurgical Processing Division (MPD)

Nominations sought for Gaudin and Wadsworth awards, Apr 66  
*Fine Grind*  
Announces five scholarship winners for 2000-01, Sep 94  
Highlights of minutes from Executive Committee meetings, Jul 70

Mineral reserves and resources international reporting code and guidelines, Jan 59

Minerals Education Coalition lists 1999 donors, Feb 60

Minerals Information Institute gives students educational materials, Jul 68

## Mining and Exploration Division (M&E)

Awards two scholarships at Colorado School of Mines, Aug 75  
*Rock in the Box*  
Accountability, Sep 92  
Accountability - teamwork's final frontier, May 119  
All aboard!, Apr 70  
An alternative approach to permitting, Oct 68  
Community relations - A bank account of goodwill, Nov 66  
Let's Forget 1999: 2000 will be better, Feb 58  
Minutes of the Executive Committee and business meetings, Aug 66  
The braille of Colorado's history, Jul 69  
The land of opportunity, Jun 120

Mining and Metallurgical Society of America awards gold medal to Alberto Benavides, Mar 67  
Mining tours announced for 2000, Mar 67  
Monticello Mine, Nov 70  
Murphy, Ivo, Oct 73  
Murphy, John N., Jul 82  
Murray, Robert E., Feb 69  
Myers, Michael T., Jul 81

## N

National Energy Foundation offers *Rock Music* CD, Sep 98  
National Minerals Education Conference educates teachers about minerals, Sep 98  
National Mining Association (NMA) Presents Excellence in Mining Education awards, Nov 67  
Presents 1999 Chairman's Award, Jan 53  
National Mining Hall of Fame and Museum Elects new board members, May 118  
Emeralds enhance museum collection, Oct 67  
Jack Schmitt to speak at Hall of Fame induction banquet, Jun 123  
Mannequin miners enliven museum display, Jul 74  
Mining hall announces \$50k expansion project, Jan 61  
Mining hall seeks rhymes of the mines, Mar 61  
Museum to develop east wing of facility, Apr 69  
Pool wins Miner's Poetry Jamboree, Sep 90  
National Research Council seeks applicants for grants, Nov 67  
National Senior Design Project Award won by Colmenares, Apr 75

## Necrology

Jan 60, Feb 77, Mar 68, Apr 76, May 122, Jun 126, Jul 87, Aug 76, Sep 100, Oct 72, Nov 72, Dec 85

Nevada Mining Association holds workshop for teachers, Sep 98

## New Media

Jan 62, Feb 40, Mar 40, Apr 46, May 29, Jun 129, Jul 64, Aug 77, Sep 71, Oct 73, Nov 48, Dec 97

## New Products

Jan 79, Feb 90, Mar 82, May 26, Apr 90, Jul 102, Sep 114, Oct 86, Nov 86

NIOSH releases training video, Nov 69  
Nix, Aundra B., Feb 68  
Norman, James C., Feb 67

Northwest Natural Resources Institute hosts teacher workshop, Oct 71  
Northwest Natural Resources Institute offers Model Mine program for students, Nov 70

## O

O'Neil, Thomas J., Jul 75  
Oak Hill Mine, Nov 70  
Oakes, Kurt B., Feb 69

## Obituaries

Barrios, Alberto H., Apr 77  
Bradley, Philip Read, Dec 84  
Bartlett, Charles E., Mar 68  
Brinley, Edward H., Nov 72  
Ferre, Thomas J., Aug 76  
MacPherson, Arthur R., Dec 84  
Martin, James W., Jun 126  
McMillan, Gordon, Feb 76  
McNeill, Harry L., Mar 68  
Merritt, Paul C., Oct 72  
Nuttall, Allan F., Sep 100  
Rundle, William J., Sep 100  
Ryan, George S., Jul 87  
Schissler, John H., Jun 126  
Skillings, David, Jan 61  
Sparks, Carville E., Nov 72  
Springston, David L., May 122  
Tandanand, Sathit, Jan 60  
Turk, Albert J., Jan 60  
Whaley, Henry P., Apr 77  
Wickstrom, Walter W., May 122  
Woodard, Frank Edward, Mar 68  
Wunder, George W., Feb 76  
Yopes, Paul, Oct 72  
Zachar, Frank R., Sep 100

Office of Surface Mining presents reclamation awards at MINExpo, Nov 70; Calls for nominations for 2001 reclamation awards, Dec 78

Ozbay, Ugur, Aug 75

## P

Paananen, Wayne, Jan 54, Oct 73  
Parratt, Ronald L., Jul 85  
Patterson, Amy, Feb 68  
Peabody Coal, Nov 70  
Peng, Felicia, Aug 71  
Peng, Syd S., May 115, Aug 70

## Personal News

Jan 56, Mar 66, Apr 72, May 122, Jun 128, Jul 74, Aug 73, Sep 96, Oct 66, Nov 71, Dec 83

Phillips, Bob, Oct 73  
Pool, Thomas, Sep 90

## President's Page

Mining outlook is positive in Salt Lake City, May 113  
Impact of the Internet on mining commerce, Oct 65  
SME board forum provides strategic direction, Sep 89  
SME's year in review Feb 57  
Strategic plan assessment and the Internet, Aug 65  
The legacy of Gary D. Howell, Jul 67

Prospects - book catalog, Mar 45  
Pugh, Joe, May 115

## R

Ramani, Raja, May 115  
Richards, Steve, May 117  
Rocky Mountain Coal Mining Institute offers scholarship, Dec 78

Rosebud Mining, Nov 70  
Rozgonyi, Tibor, Aug 75

## S

Schafer, Robert W., Jul 85  
Schoen, Greg M., Jul 78

## Scholarships

Applegate, J. Daniel, Dec 81  
Becker, Claudia, Aug 70  
Brown, Arthur B., Aug 74  
Buckmaster, Kari, Aug 70  
Cantu, Bert W., Sep 94  
Carlisle, Scott P., Dec 78  
Cooney, Margaret F., Sep 94  
Cummings, Michelle, May 115  
Drew-Davies, Alice C., Sep 95  
Malette, Skye Marie, Sep 94  
Melinkovich, Matthew, May 115  
Schneider, Matthew S., Sep 95  
Shalvis, Shelley, Aug 70  
Sorensen, Jared L., Aug 71  
Suchomel, Eric, May 115  
Theys, Jeremy P., Aug 71  
White, Joseph D., Aug 75

Science of the Comstock wins Website contest, May 123  
Seneca Coal, Nov 70

## Short Courses

NWMA offers four short courses at Spokane meeting, Nov 68

Silver, Douglas B., Aug 72  
Singh, Madan M., Feb 63

## SME Foundation

Buck-a-Week is catching on, Feb 61  
Make planned giving work for you, Sep 91  
The SME Foundation's year in review, May 120

## Society for Mining, Metallurgy, and Exploration, Inc. (SME)

2000 Show Guide, Jan 83  
2001 officer nominations, Jul 75  
25-year members receive certificates, Dec 77  
Board of Directors makes decisions in Denver, Oct 66  
Distinguished Members announced Feb 71  
Future Leaders for 2000 program selected, Apr 68  
Henry Krumb lecturers and lecture titles announced for 2000, Aug 69  
Holiday schedule, Dec 79  
Karnis chosen as 2002 president, Oct 67  
Class of '51 gains Legion of Honor status, Dec 77  
Nominations for distinguished members solicited, Sep 97  
Nominations sought for Dreyer Award, Apr 66  
Nominations sought for SME division awards, Apr 65  
Presidential candidates face election, Jan 53  
Recognizes 1999 member recruiters, Mar 62  
Research Council opportunities forum held in Salt Lake City, Jun 117  
Significant board actions at 2000 meeting, May 113  
SME membership contest offers rewards, Jan 56  
SME Sponsors make things happen at

2000 meeting, May 120  
Sponsors OTC sessions, Dec 81  
Student contest winners announced 1999, Feb 61

Southern Appalachia Mine wins first place in rescue contest, Aug 74  
Stafford, Carey, May 115  
Steffen, Stanley, Oct 73  
Stone Mining, Nov 70  
Suboleski, Stanley, May 115  
Sullivan, Arthur B., Aug 73  
Swistock, Peter, May 115

## T

Taylor, Patrick, Jul 86  
The Minerals, Metals and Materials Society (TMS), Recap of 2000 meeting, Jun 128  
Thermo Mine, Nov 70  
Thurman, Rob, Dec 78  
Toms, Don, Oct 73  
Trevits, Michael A., Jul 82  
TXU Mine, Nov 70

## U

Unrug, Kot F., Feb 68  
US Geological Survey offers poster on the Web, Oct 71

## V

Virginia Energy, Nov 70  
Virginia Tech and Utah sponsor safety conference, Apr 75  
Vulcan Materials, Mideast Division wins IMCC Minerals Education Award, Aug 75

## W

Warfield, William, Jul 76  
Western Australian School of Mines wins mining contest at Montana Tech, Jun 127  
Western Museum of Mining and Industry Henderson Mine donates electric locomotive, May 121  
Super Saturdays and special events headline summer schedule, May 121  
To host Boy Scout camporee, May 121  
Western Society of Engineers presents Young Engineers Forum, Nov 71  
White, Calvin, Sep 94, Aug 70  
Whiting, Duane L., Jul 83  
Whitman, David, May 115  
Wiebmer, John, Jul 85  
Wilkins, Kayela, Aug 67  
Wilson, John W., Aug 71

## Woman's Auxiliary of AIME (WAAIME)

Highlights of the WAAIME board meeting in Salt Lake City, May 116  
National board meeting held in West Virginia, Jul 72

## Women in Mining

Holds convention in Battle Mountain, NV, Jul 68  
Education Foundation holds Coal Education Conference for teachers, Sep 99  
Holds Industry Appreciation Night, Dec 81  
Wood, Marci, Mar 65  
Wu, Kelvin K., Feb 66

## Y

Yuan, J. Gene, Apr 68

## Z

Zasko, Marvin, Dec 81

